

# Full.HD



the ultimate sound and picture experience from Sony Europe

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## OLED screen development receives boost from Japanese government

Sony is teaming up with other leading manufacturers in a Japanese government-initiated consortium to boost the sizes and speed to market for Organic Light-Emitting Diode (OLED) screens. Japan's Ministry of Economy, Trade & Industry is putting about \$33m into the project that will run until 2012.

Sony has produced some extremely attractive production units of 11" for laptops and other portable devices, but sizes are modest. Now Sony has linked with an existing joint-venture between Toshiba and Matsushita (Panasonic) as well as others in a push to see the technology challenges overcome and to see screen sizes of up to 40 inches emerge. The other consortium members include Idemitsu Kosan Co., and Sumitomo Chemical.



The appeal for all the Japanese manufacturers is that OLEDs are highly battery efficient giving off plenty of light for minimum power demand. They do not need backlighting which means they are also slim and lightweight. At 36 inches and above the theory is that they need not be the relatively heavyweight designs that existing LCD and Plasma units are. Meanwhile, in South Korea, Samsung is also working on its OLEDs and said last week it would also boost production six-fold this year.

**SONY**

High Definition like.no.other

**AVCHD**

**HDV**

High Definition Video

**CAI**  
CINEALTA

**HDCAM**

**SUPER AUDIO CD**

**Blu-ray Disc**

**Full HD 1080**

## New VAIO notebooks created to entertain with Blu-ray Disc

Blu-ray Disc is so much more than a new movie disc format. Amongst a wide range of applications, it provides IT equipment manufacturers to redefine the role of the PC within our homes.

New from Sony, the VAIO FW-Series was created for the next generation of format High Definition entertainment. It combines the must-have features of a true 16:9 aspect ratio widescreen display with an integral Blu-ray Disc drive.

Surprisingly compact yet with an impressive 16.4-inch display and powerful thanks to a potent mix of Intel Core 2 Duo processors and ATI graphics, the VAIO FW has everything you need to make mobile HD a reality. The FW-Series is based on the new Intel Centrino 2 platform, boosting everything from multitasking and memory speed to battery life.

"Here is a portable for people who are embracing the future," said Hidetoshi Takigawa, Marketing Director for VAIO of Europe. "It is technically sophisticated and at the same time hugely stylish. It lets you immerse yourself in beautifully reproduced HD yet it remains fully portable and can be moved around the house as you desire. If you prefer to set trends rather than follow them, the VAIO FW will complement your lifestyle perfectly."



**VAIO FW-Series**

The WXGA++ (1600 x 900) resolution means masses of workspace as well as perfectly reproduced widescreen HD format movies or personal HD video content. Enhanced blue spectrum range – where human vision is highly sensitive – allows extremely accurate reproduction of the colour variations that can be perceived by the eye, while Sony's exclusive X-black LCD screen enhancement boosts contrast and delivers remarkable, natural colour. Selected models feature double lamp technology for superlative brightness, further optimising an already exceptional display.

***"Here is a portable for people who are embracing the future."***

**Hidetoshi Takigawa**  
Marketing Director  
VAIO of Europe

In order to make sure that HD movies sound as good as they look, the range uses Dolby Sound Room technology to recreate the immersive quality of a small home theatre on the notebook's own speakers or headphones.

With the ability to write as well as read Blu-ray Discs on selected models, the VAIO FW lets you edit and store up to 50GB of personal HD video content on a single disc. Powerful software including Adobe Premiere Elements 4.0, VAIO Movie Story and Click to Disc/Editor is pre-installed on all models so you have the tools you need right out of the box.

## Wireless connectivity for the HD home

Hitachi, Motorola, Samsung, Sharp and Sony are to collaborate on a fast wireless standard for the transmission of high-definition signals in the home. The companies have formed a special interest group to develop the standard this year, using Wireless Home Digital Interface (WHDI) technology from Israeli firm Amimon.

"WHDI delivers the robust performance that wireless connections must have to meet and exceed consumer demands," said Motorola's, Dr. Paul Moroney. "This new standard will help ensure optimal video delivery in the home."

WHDI does not use compression to boost data speeds to the required level for viewing, but separates signals into 'important' and 'less important' data, the latter including subtle colour and shading differences. This means that quality will degrade as the distance between devices increases, but should ensure that data is transmitted fast enough to allow seamless viewing.



The technology will be used to eliminate the need for cables in home entertainment units so that HD broadcasts can be streamed around the home without a physical connection.

While the memorandum does not exclude participants from developing their own standards, it will ensure a level of compatibility between devices. "The new standard will ensure that, when consumers purchase devices, they will enjoy a fast, easy and hassle-free wireless connection that delivers the highest quality," said Dr Yoav Nissan-Cohen, chairman and chief executive at Amimon. "The WHDI standard's objective is to enable an enriched customer experience with multi-vendor interoperability."

## Band Pro to supply revolutionary F35 HD professional camera

The migration to a High Definition world is a long and complex process involving every stage in the production chain from the camer's lens to the glass TV screen. Sony is one of very few companies that is actively involved in every stage of that production process.

Within the content creation industry, Sony created a stir earlier this year when it debuted a revolutionary new High Definition camera – the F35. Creating a new standard in High Definition acquisition, the F35 will not start shipping until later this year, but already it is generating interest from many parts of the film industry.

The latest news relating to the F35 tells that leading international camera rental company Band Pro will supply the new F35 CineAlta digital cinema camera for top end work. The company, which has offices in the US and Germany, believes the new F35 will complement the existing F23 camera, which it has already supplied on numerous commercials in Germany, as well as the recent Speed Racer film.



**Gerhard Baier**

“With the new F35, Sony brings together the advantages of digital cinematography with film-style operability,” states managing director Gerhard Baier of Band Pro Munich. “The F35 is designed to extend Sony’s CineAlta line up: it will not replace the F23. The new F35, which complements the F23 by offering a new Super 35mm-sized CCD sensor and PL lens mount, has been designed for cinematographers who have a perennial passion for 35mm film lenses.

“The F35’s newly developed Super 35mm-sized CCD sensor provides breathtaking picture quality, an extensive range of depth-of-field-controls, extended dynamic range compared to the F23 and F23-equivalent wide colour gamut. The PL lens mount of the F35 allows flexible use for the vast majority of 35mm cinema lenses, which greatly expands creative possibilities for users. Like the F23, the F35 is also designed to record on to an HDCAM SR recorder, which can be docked directly on to the back or top of the camera, or connected remotely via cable. The entire Sony CineAlta range now represents a spectrum of solutions to meet every acquisition, production and professional display need.”

“We take pride in bringing the newest technology to professional filmmakers & videographers from all over the world – offering the highest level of knowledge and expertise combined with the finest equipment and accessories available,” Baier continues. “Our close alliance with Sony and ZEISS, puts us in the forefront of the newest

developments in digital cinema. Consequently, we have been and continue to be the most comprehensive resource for HD equipment and technical information. We help cinematographers to manage the whole digital workflow and are committed to push the breakthrough of HD technology as the production format of the present and the future.”

***“With the new F35, Sony brings together the advantages of digital cinematography with film-style operability.”***

**Gerhard Baier, MD  
Band Pro**

## Sky continues to build HDTV resources

Rupert Murdoch's News Corporation continues its strategic global investment in High Definition television with a major HD upgrade project in Italy. Simultaneously in Japan, SkyPerfect (which was established by News Corp) has announced ambitious HD channel launch plans.

In Europe, Sky Italia has chosen Pace as its launch partner for High Definition personal video recorders (HD PVRs) for the upcoming launch of its HD PVR service. Pace will supply its HD PVR which comes with dual DVB-S2 tuners, H.264 compression and a 250GB hard drive to store up to 60 hours of HD programming. The TDS850NS is integrated with OpenTV middleware and NDS conditional access.

Paola Formenti, Sky Italia's Technical Director commented: "Pace has been our prime set-top box partner for many of our service launches to date from our first digital deployment with NDS conditional access in 2003, to PVR and HD in 2006. They have successfully demonstrated their expertise in delivering the whole family of set-top box technologies and we look forward to continuing to work together in bringing the latest technologies to our customers."



Meanwhile, in Japan SkyPerfect is upgrading its JSAT offering in High Definition, saying it will offer 62 HDTV channels during Q3 this year, and its target is to top 100 channels in HD.

SkyPerfectTV is Japan's largest satellite broadcaster (and is also a broadband provider) and although launched by Rupert Murdoch's News Corp it is now owned by Itochu Corp., broadcaster Fuji TV and Sony.

It has just announced its subs numbers, which stand at 3.5m subs, and says it is now targeting 6m subscribers by 2012 drawn from its DTH operation, and e2 and Hikari services. JSAT says it will be fully complying with Japan's overall intention to switch off analogue TV by 2011.

## Blu-ray Disc offers bright future for audiophiles

With the advent of Blu-ray Disc, audiophiles are holding out hope that there will be a high-resolution audio format to replace the CD, capable of multi-channel sound and so much more. Industrial band Nine Inch Nails have been amongst the first to take advantage of this new format, releasing their instrumental album *Ghosts Volume 1 - IV* via the Internet, and including in two editions a Blu-ray audio-only disc of the full album in 96kHz/24-bit stereo. But, as with Super Audio CD, it is the Classical labels once again at the forefront of this new technology as a viable audio medium.

Surround Records has released two titles as Blu-ray audio-only discs with 7.1 high-resolution sound, and recently the Norwegian label **2L** (Lindberg Lyd) entered the Blu-ray market with their first release, *Divertimenti*, a 2-disc

hybrid SA-CD + Blu-ray audio-only disc set.

As reported by Brandon DuHamel at Big Pictures Big Sound, 2L is a relatively new label on the scene, in terms of the Classical industry. The label puts a strong focus on the contemporary music of their native Norway and their multi-channel SA-CD releases buck the trend in the classical market by offering aggressive mixes that fully utilise all the channels discretely instead of using the surrounds merely for ambience.



2L's founder Morten Lindberg provides an insight into this label and their future plans for releasing on Blu-ray. He is a man passionate about sound, the future of high-resolution music, and is cautiously optimistic about the viability of Blu-ray Disc as an audio format.

“When I started as a recording engineer in 1990 there was no focus on surround sound in classical music,” explains Morten Lindberg. “It was the introduction of SA-CD that made us aware of this magnificent perspective. Surround sound gave us the solution to the depth and spatial resolution we experienced live on stage in a concert house, but were not able to recreate in stereo.”

“Blu-ray is the first domestic format in history that unites theatre movies and music sound in equally high quality. The advantage of Blu-ray is the high resolution for audio, and the convenience for the audience as now one player will handle music, films, their DVD-collection and their old library of traditional CD,” continues Linndberg.

“I personally prefer extremely high resolution PCM over the DSD. All resolutions found in the *DIVERTIMENTI* package are sample rate converted from the same DXD source files. Comparing them in our studio we find only subtle differences from DXD (24BIT/352.8kHz) down to 192kHz and 96kHz. The obvious degeneration is from 96kHz down to 48kHz. I find DSD, as found on the SA-CD, somewhat different in the colour from DXD and 192kHz PCM; in some mysterious way DSD is softer and more beautiful but slightly less detailed.”

“In DXD I find the shimmering brilliance from the original analogue source as directly from the microphones,” states Morten. “In my opinion PCM encoded to DTS Master Audio and DD True HD is not noticeably degenerated from the original 192kHz. The most obvious reduction is of course the 48kHz core extracted from the DTS. And the mandatory Dolby Digital 48kHz just sounds terrible, compared to anything.”

**“Blu-ray is the first domestic format in history that unites theatre movies and music sound in equally high quality.”**

**Morten Lindberg**

“Currently we’re in a phase where we produce for both Blu-ray and SA-CD simultaneously but I see no reason why we should not move on to 7.1 as long as we keep a compatibility with 5.1. Our dedicated SA-CD customers are important to us and we will continuously provide them with content. Somewhere down the line we might see Blu-ray supplemented with download services, integrated in the BD-live profile. Today we offer both stereo and multi-channel FLAC in 24BIT/96kHz as independent download services.

Looking ahead Morten Lindberg sees a bright future for high resolution music released on Blu-ray Disc. “My hopes are high for the Blu-ray format, and in a year from now the fabrication costs should be at the present level of DVD, making it possible even for small record labels as 2L to make Blu-ray a standard carrier for music,” concludes Lindberg. For more information on 2L visit <http://www.2l.no>.



**We are here to  
help**

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