

# Blu-ray launches in the United States

THE THIRD-GENERATION FORMAT WAR reached another stage last month as Blu-ray Disc titles hit the shelves of US retailers, closely followed by the first Blu-ray player.

Following some last-minute changes to its schedule, Sony Pictures Home Entertainment released six titles on June 20, and three more on June 27, when Lionsgate also issued six titles. Sony BMG has also announced the launch of two concert titles on Blu-ray Disc this summer, featuring performances by Rod Stewart and John Legend.

"To date, 108 titles have been announced for release on Blu-ray Disc versus 44 on HD DVD," said a Sony BMG spokesperson in early June. "Of the announced titles, 25 are expected to be available on both formats, only 19 are unique to HD DVD, and 83 will be available only on Blu-ray Disc."

By One to One's calculation, looking at a list of planned releases in the two formats, not all of which have firm release dates, the numbers of announced US releases at the time of the launch of Blu-ray was 164 Blu-ray titles (with 69 unique to the format) against 137 HD DVD titles (39 unique).

Samsung's BDP-1000 player, which was released to consumers on June 25, is capable of upscaling standard DVD to 1080p through its HDMI digital interface. The \$999 player also contains a 10-in-2 interface supporting all the major formats of memory card.

The release date of Sony's BD player, the BDP-S1, has continued to slip: according to the Sony Style website, it will ship around October 25.

Meanwhile, Toshiba has issued a firmware upgrade for its HD DVD players, launched in April. According to Toshiba, this addresses intermittent problems with the HDMI output, along with pixellation and block noise; it is also believed to shorten the player's start-up time. It does not, however, appear to address any aspects of the AAC5 copy control system.

The first non-Toshiba HD DVD player has been launched in the US: RCA's HDV5000, which has a suggested retail price of \$499.



Samsung's BDP-1000 is the first available BD player in the US

Advanced Media has announced that it will be joining the ranks of blank media manufacturers producing HD DVD-R. It will launch single-layer (15GB) RIDATA discs in July, with dual-layer HD DVD-R and single-layer HD DVD-RW following in the fourth quarter of this year. The company states that it has been able to develop both an organic dye and inorganic dye type of HD DVD-R.

On the prerecorded media side, Universal has become the second studio to release titles in a combined DVD/HD DVD format (following on from Warner, as we reported last month). On August 8, it will release *Unleashed* and *National Lampoon's Animal House* on double-sided discs. Each side will contain the same extra features as the current DVD releases; there will be no additional HD content.

As we report in our MEDIA-TECH Expo review (page 20), the HD DVD promotional push in Europe will begin before Christmas; the HD DVD Promotion Group will announce more details at September's IFA show in Berlin.

ONE TO ONE COMMENT: Neither format has enjoyed a particularly smooth launch process so far – as we have reported, delays in finalising the AAC5 copy-protection system have had a knock-on effect. The continued delay to Sonys BD player is puzzling. Perhaps component stocks are being diverted to PlayStation production?

## Singulus and QOL co-operate on high-definition mastering

QUANTUM OPTICAL LABORATORIES (QOL) of Vernouillet, France has signed a contract with Singulus Mastering for HD DVD mastering equipment. Complete mastering functionality, including application of AAC5 copy protection, will become available to QOL.

The deal, an important step in HD DVD manufacturing availability in Europe, was announced on the last day of MEDIA-TECH Expo. Also premiered was *2046*, the first European movie feature on HD DVD, a disc pressed in France.

"Singulus is the only company in the world that can offer equipment for mastering and replication of the new formats. Singulus Mastering has been demonstrating



L to R: Helmut Schilling (Singulus Technologies), Laurent Villaume (QOL), René Jansen (Singulus Mastering), Paul Muller (Singulus Technologies France)

their capabilities and know-how in mastering for many years," commented Laurent Villaume, president of QOL.

"It is clear that QOL is pioneering in the world of optical disc manufacturing. They are en route of becoming the first commercial mastering and replication house for HD DVD in Europe. We are very pleased with the choice made by QOL, as this again confirms that Singulus is one of the leaders in manufacturing of third-generation optical discs," stated René Jansen, director of sales Europe of Singulus Mastering.

Installation of the machinery is planned to start after the summer holidays.

[www.singulus.nl](http://www.singulus.nl)

## Shorts

### Test companies get DiscTagged

Doug Carson & Associates (DCA) has partnered with AudioDev and DaTARIUS its DiscTag Enabled programme. Under the programme, DaTARIUS's DaTABANK and CS-5 analysers for DVD, HD DVD and Blu-ray and AudioDev's CATS analysers for DVD, HD DVD and Blu-ray are enabled to test and verify replicas automatically.

The DiscTag Enabled workflow uses a unique marker on each layer as a key to retrieve a "Gold Reference" HCRC value and XML metadata from a network location and enable automatic physical testing with HCRC logical verification. The XML metadata contains customer, catalogue, format type, and job report information for each application that touches the title. HCRC values provide verification of the replica against the original source data without the need for the original source to be present, while additionally reporting individual mis-compare errors by sector and radius location.

[www.dcainc.com](http://www.dcainc.com)  
[www.audiodev.com](http://www.audiodev.com)  
[www.datarius.com](http://www.datarius.com)

### EMX show registration goes online

Online registration is open for the 2006 Entertainment Media Expo (EMX) trade show, August 7-9, at the Hilton Los Angeles, Universal City. The show, which is specifically devoted to packaged entertainment media, is a unique forum for content owners, media manufacturers and the content creation community to learn about the new business models and technologies that are emerging in their marketplace. The two-day event includes a technology showcase, DVD Entertainment Conference, Entertainment Packaging Summit plus the DVD Awards and Alex Packaging Awards.

[www.entertainmentmediaexpo.com](http://www.entertainmentmediaexpo.com)

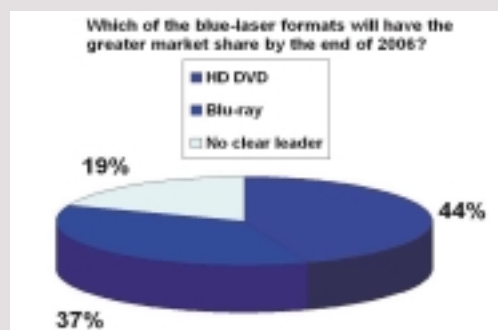
## One to One online poll: blue-laser formats

ONE TO ONE'S READERS are split over the relative fortunes of HD DVD and Blu-ray, according to the results of a poll on our website.

HD DVD has a slight lead over Blu-ray, with 44% of respondents believing it will have the greater market share at the end of the year, compared with 37% who think that Blu-ray will have the edge. A further 20% believe there will be no clear leader at this stage.

To find out the subject of this month's poll, and to cast your vote, visit our website.

[www.oto-online.com](http://www.oto-online.com)



# Industry welcomes new EU-US piracy strategy

A NEW JOINT EU AND US STRATEGY and task force aimed at fighting the global trade in counterfeit and pirate goods has been welcomed by creative industries in both continents, with the added endorsement of US President George W Bush and European Commission President Jose Manuel Barroso.

Industries from many sectors stressed the enormity of the counterfeiting and piracy problem, estimated to be worth €360 billion a year, at the recent EU-US Summit in Vienna.

According to IFPI, the EU-US Action Strategy for the Enforcement of Intellectual Property Rights will provide a structure in which the two administrations can identify and act on specific common projects with the support and involvement of industry.

China and Russia will be given priority focus in the enforcement plan, which will identify and act on clearly defined common programmes to tackle counterfeiting and piracy, leading to measurable achievements and results by 2007; industry will be consulted throughout.

The agreement will serve to raise public awareness of the health and safety risks posed by counterfeit and pirate products, which also undermine confidence in consumer brands. Legislation will also be strengthened.

John Kennedy, chairman and CEO, IFPI, said: "Tackling online piracy NOW is an essential step towards unlocking the extraordinary growth potential of China and Russia as music markets. I hope that the Chinese and Russian governments will work closely with the EU and US administrations to deliver a real, measurable reduction in the levels of piracy in these priority countries in the immediate future."

[www.ifpi.org](http://www.ifpi.org)

ONE TO ONE COMMENT: Economic, health and safety risks are posed by the sale of counterfeit and pirated products, and the practice also endangers competition and jobs. Political commitment from both sides of the Atlantic to join together to combat counterfeiting and piracy can only be welcomed.

## Ramping up the recording speed

SAMSUNG HAS INTRODUCED what it claims to be the world's fastest rewriteable 18x DVD drive, the WriteMaster SH-S1882D, which also writes to DVD-RAM at 12x. The burner offers 18x multi-format (DVD+RW, DVD-RW) recording and a five-minute improved RAM writing time over current drives. The company is targeting this high-end drive at both business and home users.



ray and HD DVD are lower.

LG says it has launched the first Blu-ray Disc recorder to run at speeds of 4x. The LG GBW-H10N drive, which had its debut at CES in Las Vegas in January, will have an estimated retail price of \$1,020.

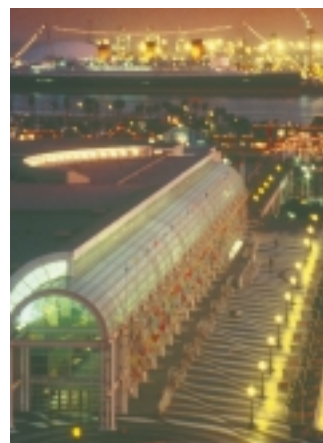
Lite-On, meanwhile, has announced its plans to release an 18x DVD writer in July, plus a 20x DVD writer in Q4. The company says it will start volume production of Blu-ray Disc and HD DVD optical drives this August, although it will remain focused on DVD writers for the next two years until the manufacturing costs for Blu-

Toshiba has announced that it will roll out its new 1TB digital hard disk recorder with recordable HD DVD to the Japanese market on July 14. The RD-A1 can record and store up to 130 hours of HD content on its hard disk and record up to 230 minutes of HD content on a HD DVD disc. The RD-A1 will also support DVD-RAM/-RW/-R disc recording and playback.

[www.samsung.com](http://www.samsung.com) [www.liteonit.com](http://www.liteonit.com)

[www.toshiba.com](http://www.toshiba.com)

## New booth package plan for MEDIA-TECH Showcase



THE MEDIA-TECH ASSOCIATION and its show organisers Messe Frankfurt (MFI and MFA) have announced two new booth package options for the upcoming MEDIA-TECH Showcase & Conference 2006.

In addition to the regular 10ft x 10ft units with furniture, exhibitors at the event, which

takes place on October 10 and 11 in Long Beach, California, are now able to book 10ft x 10ft or 6ft x 6ft units without furniture at reduced prices. The smallest package also comes with only one hotel room per unit – something especially local exhibitors have asked for. The two 10ft x 10ft packages include two hotel rooms for three nights.

[www.media-tech.net](http://www.media-tech.net)

## Macrovision chosen for AACS

### THE ADVANCED ACCESS CONTENT SYSTEM

Licensing Administrator (AACS LA) has selected Macrovision's analogue content protection (ACP) technology for Blu-ray and HD DVD.

With this agreement, Macrovision's ACP will be included in the latest specification release of the Advanced Access Content System.

"Macrovision's ACP enables content providers, content aggregators and device manufacturers to provide quality content for their consumers as next-generation technology such as HDTV gain market adoption," said Michael B. Ayers, spokesperson for AACS LA.

"We are committed to working with the AACS to help prepare the industry for the transition to next-generation optical discs, and are eager to contribute to the industry-wide conversation and collaboration to allow consumers, manufacturers and content providers to reap the benefits of these emerging formats," added Fred Amoroso, president and CEO of Macrovision.

[www.macrovision.com](http://www.macrovision.com) [www.aacsla.com](http://www.aacsla.com)

# Flexible disc details revealed

By Barry Fox

HITACHI MAXELL'S PUBLICITY has given only very sketchy details of its plan to deliver terabyte storage from super-thin DVDs (One to One June, page 10). But full details of the research have now been published in patents filed in Japan in 2004-2005 under the title "Recording and reproducing apparatus of thin optical disc". An English language version (US 2006/0101482) can now be read on the US Patent Office website.

The patent tells how the new discs will be stamped from a 1m wide sheet of PET plastic (polyethylene terephthalate) only around 100 microns – the width of two human hairs – thick. An array of 49 nickel pre-groove stampers (in a 7 x 7 matrix) is heated to 180°C and pressed onto the sheet for five seconds. The imprinted PET sheet is then coated with pigment for write-once recording or sputtered with phase-change alloy for erasable discs.

An aluminium reflective layer is sputtered on top of the coating and a 15-micron layer of protective resin added and cured with UV light. The imprinted zones are then punched into DVD-sized discs, and 200 of them stacked in a slim cartridge. Each disc has the standard 4.7GB capacity of a red-laser DVD, so total capacity of a single cartridge is 940GB, or just under 1TB.

The challenge, say inventors Hiroyuki Awano, Norio Ota and Osamu Ishizaki, was to keep the flimsy disc stable while spinning, and track it with standard low-cost DVD optics. The answer was to clamp the disc on a transparent



turntable made from glass with the same thickness and optical characteristics as the 0.6mm acrylic substrate used for DVDs, and then read the disc by using a laser under the turntable. The laser shines up through the glass/PET sandwich and reflects back down onto a sensor.

The individual discs are picked from the cartridge by an automated finger, slid onto the glass turntable and clamped with a magnetic chuck. Aerodynamic forces hold the disc flat and close to the turntable surface as it spins. Optical markers are used to align the disc and chuck with the turntable centre.

Because it takes around 10 seconds to change discs, the cartridge has onboard memory that buffers the data at around 100Mbps. So the user perceives no waiting time.

The same system can be used with blue-laser HD DVDs, says the patent, to give several terabytes from a single cartridge. No mention is made of adapting the technology for use with Blu-ray.

Those in the industry with long memories may be reminded of the flexible analogue video disc system developed many years ago by Thomson of France, to rival the rigid Laservision and Laserdiscs made by Philips and Pioneer. Thomson's 30cm optical disc could be rolled up for mailing. But the disc was thick and tough and the optics worked transmissively; the laser beam passed through the disc to a sensor on the other side. <http://tinyurl.com/qu7n>



**Bruce Apar** has been named publisher of *One to One's* sister publication, *Medialine*. Apar leaves his three-year tenure as founding editor-in-chief and publisher of *Mediaware* magazine to join *Medialine*. [www.medialinenews.com](http://www.medialinenews.com)



UK-based quality assurance and testing facility Testronic Laboratories has appointed **Neil Goodall** as its new chief executive. Goodall succeeds the eight-year tenure of founder and CEO Cliff Price, who retired in June. [www.testroniclabs.com](http://www.testroniclabs.com)



**Phil Sharry** has joined Xenon in the new post of VP worldwide sales & marketing, assuming responsibility for management activities of the direct sales force and the international distribution network. [www.xenon.com](http://www.xenon.com)

## New appointments

## Shorts

### InterVideo Ulead passes BD test

InterVideo Ulead has met and passed all of the requirements from the Blu-ray Disc License Entity, making it the first manufacturer of playback, authoring and burning software to announce certification of its Blu-ray Disc applications. The technologies, which include support for BD-R, BD-RE, BD-ROM and BD-J, will be available in WinDVD BD and BD DiscRecorder, and will later be incorporated into the DVD MovieFactory suite for video editing and DVD/Blu-ray Disc authoring.

Steve Ro, CEO and president of InterVideo, commented: "Being the first to market with BD-certified software is a fantastic feather in our cap."

[www.intervideo.com](http://www.intervideo.com)  
[www.ulead.com](http://www.ulead.com)

### Seastone sells Elite Suite to Viva

Seastone Media Group has sold and transferred all rights related to the Elite Suite of products for HD DVD and Blu-ray to Viva, which becomes the owner and exclusive global manufacturer and distributor of the Elite Case.

"We are very excited to be able to supply this case for both HD DVD and Blu-ray in all global regions," said Tony Choi, MD of Viva. "We believe this move will benefit the entire industry for both Blu-ray and HD DVD," added Warren Osborn, CEO of Seastone.

[www.vivacan.com](http://www.vivacan.com)  
[www.seastone.com](http://www.seastone.com)

### Starforce passes XP programme

Copy protection solutions provider Starforce Technologies has announced that its StarForce FrontLine Driver 4.0 has passed Microsoft's Designed for Windows XP certification programme, which helps end-users identify applications that were designed specifically to run on the Windows XP platform. StarForce's Frontline Driver 4.0 enables the accurate checking of the copy protection system, ensuring that only original versions of StarForce-protected games can be played.

[www.star-force.com](http://www.star-force.com)

### Action Duplication tops 50 million

West Conshohocken, Pennsylvania-based Action Duplication recently produced its 50 millionth disc. "We have been manufacturing packaged media for more than 15 years," commented Joel Levitt, president of Action Duplication. "We have the ability to produce as many as 80,000 discs each day. When my plant manager informed me that we reached this milestone, I was thrilled."

The company reached the 50 million mark with a project for print management company Brown+Partners.

[www.actionduplication.com](http://www.actionduplication.com)

### SwiftCD wins STOPzilla contract

US-based CD/DVD manufacturing and fulfilment house SwiftCD has been awarded the contract to fulfil orders for iS3's anti-spyware security software STOPzilla. The outsourcing will enable iS3 to concentrate on growth, explains Rick Trefzger, iS3's VP of sales: "Due to increased spyware proliferation, iS3 has been inundated with orders for STOPzilla. In order to maintain our focus on developing best-of-bred anti-spyware technology, we turned to SwiftCD for all our manufacturing and fulfilment."

[www.swiftcd.com](http://www.swiftcd.com)

## E3 eyes up console and media production

By Steve Traiman

**MORE THAN 60,000 ATTENDEES** got a glimpse of the \$35 billion global video and computer gaming market's future at E3, the Electronic Entertainment Expo at the Los Angeles Convention Center. For replicators, packagers, security and memory card providers, the future looks bright from 2007 onward.

After a market hiccup that saw sales drop 8% to 238 million software units in the US last year, most industry observers agree the current year will also be soft leading up to the November launch of Sony Computer Entertainment's PlayStation 3 (PS3) and Nintendo's Wii. That will give Microsoft a full year to further establish its Xbox 360 lead, with an installed US base of about six million systems this month.

Both Sony and Nintendo each anticipate more than two dozen titles at launch, about one-third first-party and the rest from third-party publishers. Meanwhile, production continues to expand on current system platforms. Sony will have 216 new PS2 games and 155 new PSP titles on UMD this year, with president and CEO Kaz Hirai also reporting more than 625 non-game PSP titles for movies and music videos.

Peter Moore, head of Microsoft's entertainment & games division, forecast six million Xbox Live subscribers by E3 2007 next May, with more than 160 Xbox 360 games promised by this Christmas, in addition to 825 Xbox titles.

At Nintendo of America, Reggie Fils-Amie, executive vice president of sales and marketing, confirmed more than 100 new titles this year for the Nintendo DS plus the imminent introduction of a lighter, brighter DS Lite unit. For GameCube, there were about 550 games as of May, with another 50 expected by year-end.

All replication for the launch of the larger 12cm Wii optical disc will be in Japan, where GameCube discs are also produced. The new console offers a single self-loading media tray for the initial single-layer and future double-layer Wii disc, and will also play the 8mm 1.5GB GameCube discs. Blu-ray BD production has already begun in Sony DADC's Shizuoka, Japan facility and will accommodate both local and export demand for the initial launch. Terre Haute started BD production this May with an initial 12,500ft<sup>2</sup> "clean room" operation, and replication at the Salzburg, Austria plant is targeted for July. Year-end capacity target is about 160,000 BDs a day, or five million per month in the US.

Xbox platform services general manager Doug Hebenenthal confirmed that all three authorised North America replicators – Technicolor, Sonopress and JVC – continue to expand their production capability to meet significantly higher consumer demand for more Xbox 360 and Xbox titles. Both are replicated on dual-layer DVD-9 derivatives, with about 9GB capacity. "We are watching console and media production to keep in sync," he said, "and we're in really good shape."

The memory market is taking off for gaming, SanDisk marketing consultant Ken Castle told *One to One*. "We got into gaming last April, producing the Memory Stick



SanDisk's Ken Castle: memory market for gaming is taking off

Pro Duo for Sony's new PSP system (now 256MB to 2GB), and never looked back since," he noted. For PC games and consoles, the 512MB and 1GB Cruzer Crossfire USB Flash Drives bowed in January, the latter blister-packed with a bonus Xbox 360 *Prince of Persia* strategy guide. "We're looking for other partners for similar game promotions," he added.

And on the secure packaging front, Emplast's business unit manager Phil Sykes noted a big trend in the requirement by Wal-Mart and other mass merchants for an environmentally sustainable and energy-efficient consumer package. The firm's new DSS-2100 disposable security frame with a deactivatable EAS tag is an affordable theft deterrent medium for games in the \$9.99 to \$19.99 range.

## For your diary

### JULY

**13-16** Imaging Expo, Shanghai, China  
[www.imaging-expo.com](http://www.imaging-expo.com)

**14-16** NAMM Summer Session, Austin, USA  
[www.namm.com](http://www.namm.com)

**30-August 3** SIGGRAPH 2006, Boston, USA  
[www.siggraph.org](http://www.siggraph.org)

### AUGUST

**2-5** NARM, Kissimmee, Florida, USA  
[www.narm.com](http://www.narm.com)

**7-9** EMX, Century City, California, USA  
[www.entertainmentmediaexpo.com](http://www.entertainmentmediaexpo.com)

### SEPTEMBER

**1-6** IFA, Berlin, Germany  
[www.ifa-berlin.de](http://www.ifa-berlin.de)

**5-10** CeBIT Bilisim Eurasia, Istanbul, Turkey  
[www.cebitbilisim.com](http://www.cebitbilisim.com)

**7-12** IBC 2006, Amsterdam, The Netherlands  
[www.ibc.org](http://www.ibc.org)

**13-15** Replication Expo, Shanghai, China  
[www.replicationexpo.com.cn](http://www.replicationexpo.com.cn)

### OCTOBER

**3-7** CEATEC Japan, Tokyo, Japan  
[www.ceatec.com](http://www.ceatec.com)

**6-9** AES, San Francisco, USA  
[www.aes.org](http://www.aes.org)

**10-11** MEDIA-TECH Showcase & Conference, Long Beach, USA  
[www.media-tech.net](http://www.media-tech.net)



Emplast's Phil Sykes: environmental demands