The Essential Home Theatre Resource™
WIDESCREEN REVIEW® NEWSLETTER
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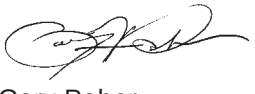
WELCOME!

We hope you have been enjoying *Widescreen Review*'s FREE monthly Newsletter. Since many of our readers are new to *Widescreen Review* and have not had the benefit of reading the early educational articles that we printed years ago, we have decided to include one featured archived article in each newsletter. This month we feature "The Shape Of Film Art" from *Widescreen Review* Issue 2, and we hope you find it interesting and informative. Of course, there is also still plenty of all-new content that is only available in this newsletter and not anywhere in the print magazine. If you haven't had a chance to check out our sister publication, *Ultimate Home Design*, their first newsletter is now available for free at www.ultimatehomedesign. Enjoy!



Gary Reber
Editor-In-Chief, *Widescreen Review*

COMING SOON TO NEWSSTANDS

Here's a sneak peek into what's coming in Issue 114, November, 2006 of *Widescreen Review*:

- Danny Richelieu's review of the Monster® THX® Loudspeaker System
- A review of the Faroudja By Meridian D-ILA 1080MF1 Video Projector by Bill Cushman
- Integra® Research—RDC-7.1, RDA-7.1, RDV-1.1 reviewed by Gary Altunian & Stacey Spears
- A review of the SV Sound SBS-01 5.1 Loudspeaker System by Gary Altunian
- Gary Reber tackles Blu-ray Disc Vs. HD DVD
- Brian Towne gives us an Update On DTS-HD™
- Over 50 Blu-ray Disc, HD DVD, and DVD picture and sound quality reviews
- And more...

ATTRACTIONS

On Screen

Departments

Mark Waldrep, Ph.D.

AIX Records Founder Discusses The State Of Surround Music

Danny Richelieu & Tricia Spears

One thing is for sure—Founder, Chief Engineer, and President of AIX Records Mark Waldrep loves music! As a composer, musician, and recording engineer, Mark has been involved with a variety of musical styles and loves everything from Bach to the Beatles.

By using state-of-the-art, high-resolution, digital equipment and a signal path that maintains 96 kHz/24-bit fidelity throughout, AIX Records seeks to enhance the experience of listening to music through improvements in sound quality, innovative 5.1-channel surround mixing perspectives, and by adding plenty of interactive disc-based annotational materials. The company approaches each project with one goal—to maximize the quality of the recorded sound.

With this in mind, Managing Editor Danny Richelieu and Surround Music Editor Tricia Spears, decided to pick Mark's brain and see what he thought about the future of Surround Music.

Tricia Spears, *Widescreen Review*: Has surround music been a disappointment, as far as market penetration, to this point?

Mark Waldrep, AIX Records: In terms of the DVD-Audio and SA-CD formats themselves, yeah, they have not reached mainstream acceptance to the degree that anybody would have hoped. But the world of high-resolution surround music is alive and well. I think it's even expanding. For example, AIX Records just finished a custom sampler for Acura, which is going in each of their new high-end RL model automobiles. They have two more automobiles with surround systems in them and are planning to equip their entire product line within a year or two. There are also several from Infinity and Nissan, and Toyota and Lexus as well. Detroit is getting into the act, so the ability to play surround music—it may come from a music server, it may come from XM satellite radio or from optical discs—is inevitable. It's just going to take a little bit more time than what anybody would have liked.

I opened up my new high-resolution surround mixing/demo facility. It's really a wonderful room—an all digital signal path, B&W loudspeakers, Niveus, Meridian, Audience, Cardas, Stewart, Runco—a state-of-the-art media delivery room. I had the Los Angeles and Orange County Audiophile Society in for a visit [after it was completed]. This is a group that is traditionally two-channel. In fact, they're advocating vinyl over CDs regularly, and I am naturally sensitive to that because I've never made a CD. They don't sound good—even the best CDs pale in comparison to true high-resolution recordings. I tried to down-convert one of our tracks and make CDs as demos for some vendors at the Home Entertainment Show, and it just didn't survive. But the audiophile group was assembled in the midst of my 5.1-system and the opening salvo included a question from one of the most conservative guys. He asked, "How many people in here are really interested in having this kind of surround system in their house?" and only two people in the audience raised their hands. But after some explanations and demonstrations, many of them understood my motivations and that I was serious about what I'm doing. They appreciated that I have dedicated a lot of my time and resources to making the best high-resolution surround projects possible and that my background is in music. I have a Ph.D. in music composition as well as academic degrees in Art and Computer Science, so they got it that I wasn't just a "gimmick hound" who was trying to come up with something to make more sales happen. When they listened and rotated in and out of the sweet spot, several of them said

aloud, "This is the best music reproduction I've ever heard," and several others came up to me confidentially afterwards and said, "You know, you've opened a door here. I had no idea it could be like this."

So, it's my belief that exposure to a great system and to music well performed and recorded can turn even the most ardent stereophiles into multichannel believers. AIX Records is creating programs that actually advance the state-of-that-art as new technology becomes available for production and delivery. Sadly, what some other labels have done is simply repackage older standard resolution tracks in 5.1 surround and hope that people will flock to their titles. They have usually been disappointed. So DVD-Audio and SA-CD may have failed to catch on but the confluence of HD video and high-resolution surround audio in the new optical disc formats [HD DVD and Blu-ray Disc] may just be the second chance that we need. And, I think, more importantly, media servers and online delivery are going to shake things up in a big way.

AIX has over 700 tracks that have all been recorded the same way. The word of mouth on our stuff has been very encouraging…enough to keep us in business over these past six years. I get emails everyday from new customers saying, "I had no idea that audio could sound so incredible. Keep up the great work."

***WSR* Spears**: How may DVD-Audio discs have you made?

Waldrep: We're up to 50 individual titles. That's about ten new ones per year. There are another nine that are in various stages of postproduction. Some advocates and reviewers have said that AIX is one of the best "DVD-Audio" labels out there. I'm not a DVD-Audio label at all; I'm a high-resolution, surround music production company that is currently delivering on the DVD-Audio/Video format. But we're also developing a high-resolution download Web site called iTrax.com that will be online this fall. Imagine accessing and downloading high-resolution surround music directly to my Niveus media server. The new site will be the first to deliver real high-resolution surround music.

My problem is that distribution is challenging in remote areas of the world. If somebody in Oslo, Sweden or Johannesburg, South Africa wants an AIX track or album, they have to wait until a physical disc gets there. And that can be tremendously expensive in terms of value-added tax, shipping, and insurance. But iTrax.com will be able to deliver an iTunes-type experience except without the fidelity compromises.

Danny Richelieu, *Widescreen Review*: So, how would those files be delivered? What format would they be in?

Waldrep: Windows Media Audio. Customers would have the choice as to what quality level and what mix perspective they want. The tracks would be available in a variety of quality levels and in several different mixes. A customer can choose between a lossless "stage" mix or an "audience" perspective that doesn't take up much time to download. iTrax.com is completely scalable. When you go to a download Web site right now and purchase a track, they tell you what quality you're going to get. It might be 128, 192 kbps, even up to 500, or more. iTrax will give you a variety of fidelity levels, all the way up to true lossless high-resolution. If you start with CD quality sound, it doesn't matter as much as recordings that were captured at 96 kHz/24-bits. You can't get any better than the quality that you start with, which means analog tape or CDs are never going to be as good as real high-resolution tracks. And that's what we deliver, real high-resolution recordings, and we'll continue to deliver them through whatever means are available. We'll use physical optical discs, online delivery, and even satellite broadcasts.

***WSR* Richelieu**: So iTrax.com will only provide high-resolution tracks…nothing that came from a CD or analog tape?

Waldrep: Right. When someone goes to iTrax.com, they will be guaranteed that these tracks were recorded at high-resolution and that they are being delivered to you in high-resolution. No funny business with upsampling or decimating down or whatever. When you take a track from most of the people that have been doing older mixes into the 5.1 surround format, you start with analog tape or low-resolution digital. There's just no way to improve the quality after the source is made. Think about this: if you shot home movies in 1958 at a family Christmas on 8mm film and then did a telecine to a high-def 1080p capture, it's still going to look like 1958 8mm film, not like the footage that new equipment can deliver. The amount of data that you have in the beginning is the most you get.

AIX Records is a specialty-type label. I know that. We produce products of uncompromised quality to give listeners that really appreciate music and that have reasonably good systems a chance to hear music the way that it should be heard. There are many thousands of people that appreciate what we do. We've been very fortunate that many of them pass along the information to their friends. Getting our tracks into the Acura RL automobile wasn't an easy thing, but after they had heard a bunch of other tracks, they came back to AIX and proposed to use only ours.

***WSR* Spears**: That's great.

Waldrep: Seven of our best tracks are on that "Gift Of Music" sampler.

***WSR* Richelieu**: So, I take it that you're expecting the surround music market to go more towards downloads through a media server in the home. Do you still plan on producing DVD-Audio discs?

Waldrep: Oh, sure. The kind of things that we're doing with DVD-Audio discs are really much more than that. I'm finishing up one with Lowen and Navarro right now, and it has four sides. It's a DualDisc® with a DVD-Audio side and a stereo CD side for portability. The other disc contains a two-hour linear "PBS-type" program using DVD-Video, and the other side has all the media in an interactive layout.

***WSR* Spears**: What about SA-CD?

Waldrep: I'm not interested. One, it doesn't have multimedia capability, which I think is the future. Our productions have over three hours of multimedia content. I'm finishing up a six-minute montage on Eric Lowen's career and life and am using Ken Burns-style photographic fades through the background over a piece of surround music. There are plenty of really good-sounding SA-CDs, but I prefer high-resolution PCM and the DVD-Audio/Video format. There are lots of traditional record companies and consumers that are all about the music experience. They simply want to listen to the tracks, and SA-CD does a reasonable job of that. With the CD hybrid layer, it's even better.

But at the end of the day, I'm building media experiences, so our choice was DVD-Audio/Video. We're a media record label rather than just audio, because we shoot video of everything. We want our customers to have the ability to sit down in front of a big ten-foot screen and watch high-def video of people playing live in surround sound. I think it's a better experience than just listening to it on a stereo CD or even a good quality SA-CD.

It's about sales and marketing. Look, people make great-sounding SA-CD's, and people make great-sounding DVD-Audio discs. I get particular pleasure when somebody writes me and says, "You know, until I heard your stuff, I was an SA-CD fan." It's so much more about the production process that goes into making the discs…where you record, how you record, whether you use equalization and compression, and all the other stuff that can really destroy fidelity. When you don't do all that stuff, you can make some really great-sounding recordings.

***WSR* Spears**: Right. So, speaking of high-definition video, have you looked into

putting out your surround music releases on HD DVD or Blu-ray Disc?

Waldrep: I have. It's pretty disappointing that most of the discs that are out there don't actually use TrueHD or DTS-HD™ Master Audio yet. The tools are very much in their development stages. These formats continue the ability of an optical disc to carry forward with a surround mix, but will they get the chance in the face of broadband delivery? It's extremely expensive, for one, to make those discs right now. There are only 10,000 players that were made from Toshiba. Maybe the Blu-ray numbers will be a little bit higher. The feedback in magazines and on the forums has not been encouraging. Right now there are over a million media servers in America's homes. So, if home installers are putting media servers into the high-end rooms, and my clientele are high-end guys that like to have the best, I'm not particularly bothered by not being able to get HD DVD or Blu-ray products out. They present a linear movie kind of experience. Music can be enjoyed without your eyes glued to a screen. While I would love to be there and have that equipment, it's not worth a couple of hundred thousand dollars to me to go after a market that's at war with each other. Online delivery is coming to a home theatre near you very soon. It's no joke that Intel® and Microsoft® are spending hundreds of millions of dollars to make machines capable of playing high-resolution multichannel audio.

***WSR* Richelieu**: So, what are your impressions so far of these new codecs—Dolby® Digital Plus, Dolby TrueHD, DTS-HD, and DTS-HD Master Audio?

Waldrep: The specifications are very impressive. That they expand these things out to greater channels and so forth is admirable, but I don't think that it means a whole lot, at least for the time being. We have to get the world ready to listen to music in surround. And being a guy that got a Ph.D. in binaural audio and knows a lot about what stereo, acoustics, and hearing are all about, we've got a format right now that works great. I've recorded everything with stereo pairs and microphones and created the sort of soundfield that people are describing as hyper-real. "It's the first time I've heard things sound better than real life," that type of feedback. So, yeah, we want greater capability, but we have to make the marketing shift to people listening to more than just two loudspeakers before we get too far down the line. I've heard 10.2, I've heard all the stuff that Tom Holman's doing—I've even heard 100 loudspeakers in a room down at a research lab in San Diego—but you can't deliver that into the home. So, let's stick with a format that we've got right now and make better quality happen, so that at the end of the day we can really deliver for the first time lossless audio and high-definition video at the same time. We've never been able to do that before, and now we can. But we can and will do it. AIX did it at the Home Entertainment Show. I played high-definition video and lossless audio through our Niveus media server. It was a lot less expensive to make than a custom disc, I'll tell you.

***WSR* Richelieu**: So you think that's how new consumers are going to get into surround music in the future, through media servers?

Waldrep: I do, yeah.

***WSR* Richelieu**: You don't see optical discs really driving the mass market?

Waldrep: I don't, no. I think, and I stood in front of the International Recording Media Association in Scottsdale as a presenter/speaker a few years ago and said, "Look, you replicators don't have to worry about discs going away," and they don't. There will always be discs, but the growth won't be there like before. The AIX Collector's Edition thing that I'm doing—it's a $50 retail product—is for the people that love Lowen and Morrow, who want a signed and numbered copy to put on the shelf. But, in terms of just getting music down to listen to and enjoy, it's going to be servers at home and in your car. Alpine® and Bose® have got that kind of technology today.

***WSR* Richelieu**: Going back to HD DVD and Blu-ray Disc, the formats allow for up to eight channels of 24-bit, 96 kHz LPCM on the disc, which would mean you could put a full 74-minute album in LPCM at its full data rate on these discs. Is that something you're looking into?

Waldrep: Well, I've already got that. I mean, if you use MLP right now, you can do that. It's only when you try to tie it in with a picture that it becomes difficult. So, yes, the idea of having LPCM means that I wouldn't have to encode into MLP, which maybe would make things more compatible across the board if machines don't have MLP decoders or Dolby TrueHD. They do, so whether it's 5.1 channels or 7.1 or something in between, I mean, we have the capability and the producers will choose, depending on what they're developing, whether it's music or movies or some kind of art piece, just how much of that technology they're going to use. I'm tremendously excited about it. I think it's the right thing to do. There's a lot of power there. It's just not been popularized or marketed in such a way. When multichannel audio came out the first time [on computers], I did a big sampler for Creative Labs with our stuff on it. But, there are still problems that you've got even just getting out to the million and a half people that have surround systems attached to their computers through Creative Labs' Sound Blaster X-Fi. Are people sitting there listening to music that way? And what they're listening to isn't always a pleasant experience in surround land because of the variety of quality levels that get delivered. A lot of people that came up to me at the Home Entertainment Show said, "Mark, DVD-Audio is great; I love it, but I never know what I'm going to get. Because if I buy a disc from Company X and if I buy a disc from Company Y, or from you Mark, they might be three different things. One might be an old CD that's been extracted and upsampled and called a DVD-Audio disc, one might have come from an analog tape from 30 years ago, and your stuff was recorded six months ago." You never know what you're going to get, so the quality level is all over the place, and that sort of killed it because people would get their big name band or their *Yellow Brick Road* or *Dark Side Of The Moon*. Depending on your format, they would be unhappy or many of them would be unhappy or feel violated that somebody took a classic record and spread it out into surround or that the old soundstage is moving in the midst of the mix. But that's personal taste, and whether people have gotten used to that or not, but my experience has been, once you've played something for somebody that tries to build this highly surreal surround field, there's no going back.

It's not about the business of music. I don't do this to get rich, or I wouldn't be putting out the kind of artists that I put out. I do this because I really want people to understand what the capabilities can be, and gladly we've bumped along enough and gotten enough recognition from people that we've made enough money to make the next one. In fact, enough to build a beautiful studio here to show off what we do to potential artists and managers and consumers and others.

***WSR* Richelieu**: So, just to wrap this up, on the surface, surround music might look like it's in a state of flux, with DVD-Audio and SA-CD sales waning, but how do you see—what do you see for the future of surround music?

Waldrep: I don't think there's any other place it can go. I absolutely believe that the only way that we're going to be able to improve the listening experience is through multichannel surround music. You've got all the resolution in the world in terms of fidelity, but we don't use it. Producers go to mastering sessions every day and reduce the fidelity of their tracks. That's what mastering

engineers do. I spent 16 years as a mastering engineer. Make it louder. Do it again, it's not as loud as it can be. There's too much dynamic range. They've got to get this thing on the radio because that's what record labels need, and making a track sound louder than the previous one helps. So, there are all kinds of really slick tools to make what is generally dynamic music a pancake or a flat brick of sound. It's not pleasant to listen to, to me, so if you've got that resolution and use it, and you then spread that out into a soundfield that is wider, bigger, and more immersive than what people have had, they love it. Surround will be built into homes, built into cars, they'll even use convolution algorithms like Dolby Headphone to get it into a set of two-channel ear buds. That's what people will hear, music more as an immersive type thing than previously. There's no other place for it to go. The quality we've already achieved. I mean, when you listen to high-frequency cymbals and stuff at 96 kHz, you've got all there is to get. And dynamic range, if you leave it alone, it can be captured in 24-bits just great. But where else do you go? The future is in surround. I think I would end by saying the future is in high-resolution surround with media, visual and otherwise.

***WSR* Richelieu**: Yeah. Great.

Waldrep: It may take a bunch more years. It might take five years. It might be ten years. Think about what's required to deliver lossless high-resolution 5.1, and it's getting closer and closer to being a reality. In my neighborhood, 15 to 20, or even 30, megabits a second coming through the pipes in the road is a common thing. And it's even bigger in Scandinavia and in the Pacific Rim; they've already got it. So, yeah, it's changed my attitude a lot over the course of the last two or three years to see what Intel and Microsoft and some of these high-end media servers are doing. We've now been able to compress the music without losing the fidelity and get it through a pipe so that anyone can listen to high-quality music virtually anywhere in the world. So if somebody wants to demo a high-resolution surround track, they can. I did it down in Florida at the EHX. I attached an Ethernet cable to the media server and played our Demmy Award-winning track of "Guitar Noir" from Laurence Juber's *Mosaic* record, and people didn't know it was coming through the Internet. That was a lossless file that I was streaming in 5.1 channels into that room.

***WSR* Richelieu**: That's great!

***WSR* Spears**: Yeah.

Waldrep: Yeah, it was pretty cool. We are in a state of flux, but it's not doom and gloom from my perspective. Maybe the formats didn't catch fire, but the good content is still there; high-resolution music is still viable.

***WSR* Richelieu**: Thanks, Mark, for a great On Screen interview.

NEWSLETTER EDITION

Coming Soon...
To A Retailer Near You

Tricia Spears

New Video


Olevia 565H

Syntax-Brillian has introduced the first three new LCD and LCoS HDTVs under their **Ölevia** brand. The 42-inch **742i** ($4,000) and the 47-inch **747i** ($5,000) HDTVs include 1920 x 1080 high-definition native resolution, a dynamic contrast ratio of 1600:1, a cinematic 16:9 aspect ratio, and a 178-degree viewing angle. The 742i and the 747i are available now. The 65-inch **565H** LCoS HDTV ($4,300) offers true 1920 x 1080p resolution and Pixelworks DNX video processing. It supports 480i up to 1080p native resolution input via HDMI and DVI inputs, has a contrast ratio of 4000:1, a cinematic 16:9 aspect raio, and 4 millisecond average response time. The 565H will be available sometime in October.

Syntax-Brillian *866 965 3842* *www.olevia.com*

New Electronics


Audio Design Associates Suite 8100

New from **Audio Design Associates** (**ADA**) is the **Suite 8100**. The company's most affordable and compact multi-room system, the 16-channel, eight-source, eight-zone system is fully amplified. Included is one of the following Tuner options: standard AM/FM/Weatherband radio, XM Radio, Sirius Radio, or the new ADA HD AM/FM Radio tuner with WX band. Ideally matched with ADA's family of keypads, as well as the iHome Multi-Center and iBase/iBase eXtender, the Suite 8100 retails for $4,000 and is shipping now.

Audio Design Associates *914 946 9595* *www.ada-usa.com*


Richard Gray's Power Company 600RM Pro

Richard Gray's Power Company, LLC has announced the addition of the **600RM Pro** and **Extender** to their power management product line. The 600RM Pro features six Hubbell outlets on the back and one convenience outlet on the front in a slim, two-rack space chassis. The one-rack space Extender is internally wired with 12-gauge cable and features six Hubbell outlets. The Extender purposely does not contain any filtering, so that all connected components receive an unrestricted flow of current. Both the U.S.-manufactured 600RM Pro and Extender ship with detachable rack mount ears for quick installation. The 600RM Pro is available for $1,295 in a matte black or silver chassis, and the Extender is available in matte black only for $295. Both products are shipping now.

Richard Gray's Power Co *800 880 3474* *www.richardgrayspowercompany.com*


Crowson Technology A300

Crowson Technology, LLC's new **A300** TES Stereo Power Amplifier is now available. Capable of powering up to four TES-100 transducers, the A300 delivers audiophile-grade, remote-controllable performance. With a variable low pass filter of 20 – 600 Hz, a flat frequency response down to 2 Hz, and an ultra quiet variable speed fan, the rack-mountable A300 sells for $800.

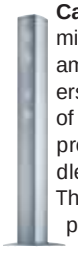
Crowson Technology, LLC *888 427 6976* *www.crowsontech.com*

New Loudspeakers


Triad InWall Gold/6 LCR

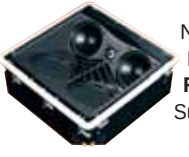
The top-of-the-line **InWall Gold/6 LCR** Loudspeaker from Triad Speakers, Inc. is the latest addition to the company's lineup. Featuring Triad's elegant Acoustimesh custom-paintable metal grille, the InWall Gold/6 LCR includes an overbuilt acoustically inert enclosure for low distortion, high sensitivity, and high-performance handling. With a one-inch fabric dome proprietary tweeter, 5-1/2-inch woofer, two 8-1/2-inch metal cone woofers, frequency response of 50 Hz - 20 kHz, and 250 watts of power handling, the InWall Gold/6 LCR is built in the U.S. and is backed by Triad's limited ten-year warranty. The loudspeakers are available now and sell for $2,000 each.

Triad Speakers *877 264 6315* *www.triadspeakers.com*



Canton has introduced their **CD 3200**, 2-1/2-way active aluminum-body loudspeaker. With a built-in 200-watt IcePower™ amplifier module and four aluminum four-inch mid/bass drivers, the CD 3200 has been engineered to make optimal use of the increased power and response the internal amplifier provides. High-frequency reproduction in the CD 3200 is handled by the company's ADT-25 aluminum-manganese tweeter. The Canton CD 3200 is available now for a suggested retail price of $1,600 each.

Canton USA *612 706 9250* *www. cantonusa.com*



New from **Definitive Technology®** are two Reference Architectural Series Speakers, the **RCS II** In-Ceiling model and the **RSS II** Surround Speaker. Both loudspeakers feature a totally non-resonant sealed medite enclosure. The flush-mounted RCS II features a D'Appolito driver array, which is angled down and aimed at the listening area to achieve an extended low frequency response of 22 Hz - 30 kHz. The RSS II features an angled curved bipolar array and delivers uniquely enveloping surround performance to immerse the listener in a complete 360-degree soundstage. When installed in a ceiling, the direction in which the driver arrays face can be rotated 90 degrees. Each RSS II bipolar surround loudspeaker contains two complete three-way full range systems for a total of six driver/radiators in each loudspeaker.

Definitive Technology® *410 363 7148* *www.definitivetech.com*

The Shape Of Film Art

The Academy Aperture

People with a penchant and appreciation for a quality motion picture presentation are often disheartened at the deceptions that are promoted with regard to motion picture exhibition and the transfer of film art to the home video medium via broadcast television, videotape, and laserdisc.

Promises of "complete and uncut" from HBO to the Movie Channel and other pay-TV motion picture programmers and purveyors of home video, lead viewers to assume that an *entire* film, just as it was shown in the theatres, is offered.

This is not a true statement. Though whole scenes are not apt to be missing, almost all motion pictures produced in the last 40 years are routinely pared in their image shape as a broadcast or home video presentation—many losing nearly half their originally photographed images—to accommodate the squarish confines of the television screen. It is the picture screen shape or *aspect ratio* (width relative to height) that precludes a faithful recreation of a widescreen release viewed on the home screen.

At the time of its introduction in the early 1940s, television technology adopted the 1.33:1 aspect ratio or Academy Aperture (Academy of Motion Picture Arts and Sciences) that predominated the motion picture industry. This was the format for virtually all films prior to 1953.

The Academy Aperture is a defined 1.33:1 area within the camera's full aperture negative area. The Camera Aperture is the area between the 35mm perforations, including the blank area normally reserved for the optical soundtrack on release prints. The Academy Aperture's shape is roughly that of a standard video monitor, so virtually no picture information is lost when a film shot in 1.33:1 is transferred to home video.

The rising popularity of television and the accompanying drop in motion picture theatre attendance and revenue in the years following World War II, prompted the studios to engineer new methods to provide an experience that could not be reproduced on its upstart adversary.

The Widescreen Epoch

The widescreen epoch was ushered in with the 1952 release of *This Is Cinerama*, a film which drew attention to its immense panoramic 2.76:1 widescreen curved screen image achieved by synchronizing three cameras and three projectors. Expensive to produce and exhibit, this format never flourished, but a host of more practical methods were developed, several of which provide the widescreen formats which shape film art today.

The most successful method for widescreen exhibition was introduced in 1953 by 20th Century Fox® with the premiere of *The Robe*. CinemaScope® was a single camera 35mm process using special curved anamorphic lenses to "squeeze" the widescreen image into the standard dimensions of the 35mm negative during production and later optically "unsqueeze" the image with the theatre's projection lens back to its original wide-screen proportions. CinemaScope presented a spectacular panoramic 2.35:1 aspect ratio.

Most films of the '50s and '60s were produced in the anamorphic 2.35:1 aspect ratio, though often under other names and slightly different aspect ratios. By the early '70s Panavision® had superseded the other *Scope* formats to become the defacto standard anamorphic 2:35:1 widescreen format. Scope is the term used today in the industry to refer to a Panavision widescreen anamorphic release. Typically, a single word credit notation—*Panavision*® or *Filmed In Panavision*®—designates a widescreen anamorphic release.

Other filmmakers desiring improved resolution opted for photography produced in true 70mm 2.21:1 (a 65mm image negative with 5mm allocated for theatrical release prints in six-track discrete surround stereo sound). The 70mm widescreen panoramic image is projected at 2.05:1.

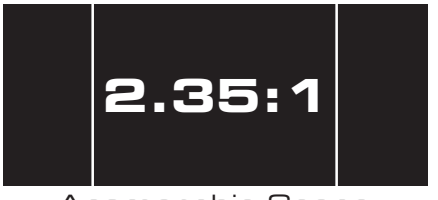
With large curved screens that enveloped the audience and multi-track audio, people were lured back into theatres to be entertained by the widescreen spectacle. As the Scope and 70mm pictures proved to be big box office draws, cost conscious filmmakers began searching for a method to make widescreen movies without having to employ expensive cameras with anamorphic lenses or special 70mm equipment.

Widescreen Methods

The most successful of the methods explored produced a 1.85:1 aspect ratio on 35mm film stock without special equipment for the compression/expansion process. Today this flat, spherical lens format is the Academy Standard widescreen format otherwise known as Flat Spherical Panavision®. While not nearly as wide as

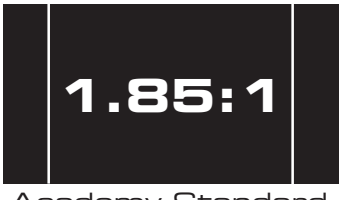
Aspect Ratios

NTSC Television
Academy Aperture

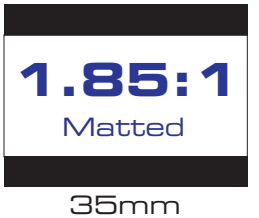


Anamorphic Scope
Panavision®
CinemaScope®

70mm



Academy Standard



35mm
Academy Aperture
Matted To 1.85:1
Flat Spherical Panavision®

The Shape Of Film Art

anamorphic Panavision or CinemaScope, 1.85 is considered by some directors and cinematographers to be the best compromise between framing in the outmoded 1.33 and producing in the more expensive Scope or 70mm methods. The European Standard using this method produces a 1.66:1 or 1.75:1 aspect ratio.

With Flat Spherical Panavision®, the cinematographer frames the shot either with a *hard matte*, a viewfinder fitted with a plate within the camera that matches the 1.85:1 aspect ratio blacking out the top and bottom quarter of the Academy Aperture 1.33 frame, or a *soft matte*, a viewfinder with grounded-glass predetermined framing marks for a 1.85 composition.

The hard matte technique actually masks the film in the camera *as it is being shot*, the black bands becoming forever part of the original negative and all subsequent prints. The hard matte ensures that the film is always framed correctly. When transferred to video, since the matte is actually part of the negative, the only way to have the image fill the entire 1.33 video viewing area is to enlarge it; until the black bands disappear off the top and bottom of the screen. This produces soft, grainy pictures with a good amount of original image lopped off the sides, resulting in the unpleasant side effect of having to pan and scan the image.

With the soft matte method, a picture composed for 1.85 projection will contain dead space in the actual upper and lower portions of the 35mm Academy Aperture frame, picture information that is not intended to be shown. A plate is added either during the production of the release prints or by the projectionist at the time of the theatrical presentation to mask the frame for the desired 1:85 projection.

Another lensing technique which utilizes the full 35mm aperture is known as Super 35. This method allows for creating multiple types of release prints with differing aspect ratios simply by matting the original camera negative to the desired shape. With Super 35, it is possible to produce both an anamorphic 2.35 and non-anamorphic 1.85 release print as well as lens for a 70mm 2.05 projection. The director composes in a viewfinder with predetermined framing marks located across the upper and lower sections of the Camera Aperture from perforation to perforation. The filmmaker decides which aspect ratio to compose for and upon completion of post production, instructs the lab as to what aspect ratio to extract from the full aperture frame for the theatre release prints.

While anamorphic 2.35 uses special lenses that *squeeze* the widescreen image to fit within the standard 35mm Academy Aperture, Super 35 allows the director to compose for 2.35 with standard flat spherical lenses used in 1.85 photography. This is accomplished by extending the width of the frame into the blank negative area reserved for the soundtrack on release prints.

Pan And Scan

As you can see, the technical requirements for widescreen production make it impossible to show "complete and uncut" on 1.33:1 shaped video monitors a widescreen motion picture produced in Panavision®, CinemaScope®, 70mm, Super 35 or Academy Standard Flat1.85:1, (or any of the other widescreen aspect ratio variables developed since 1952) *without* special consideration for the widescreen image in the video release.

Without such consideration, widescreen motion pictures projected in SuperScope® 2:1; Todd-AO®, Super Technirama 70® or 70mm Panavision® 2.05:1; Panavision®, Cinema Scope®, or Super 35 2.35:1; MGM Camera 65®, Ultra Panavision® and Cinerama® 2.76:1, when transferred to home video must undergo the surgical process known as *pan and scan* in which the picture area is lopped substantially. The visual language of a film is contoured to fit the confines of the comparatively narrow, squarish television screen. The film to video telecine technician or colorist electronically follows the action, horizontally panning the film to capture the most pertinent scene-to-scene action. Even the most competent pan and scan excision upsets the photographic balance of a film—creating in effect, a redirected, recomposed, rechoreographed version of the original film and an unavoidable change in the emphasis on events and characters from the filmmaker's intentions. Long shots become medium shots, medium shots become closeups, and closeups, closer than close. In the end, the process wreaks havoc with balanced, finely conceived widescreen compositions and is clearly a distortion of the filmmakers' art.

When a picture that was produced with the standard 1.85:1 soft matte method is transferred to video, broadcasters and home video distributors may choose to *add to* rather than *cut from* the original picture area that was exhibited theatrically. Since the original Academy Aperture negative mirrors the shape of the video screen, the dead space not projected theatrically is transferred along with the composed area which gives the video viewer *more picture at the top and bottom* than was seen in theatres. The original composition as intended by the director and cinematographer is thrown off with closeups no longer close with all the additional extraneous picture elements above and below. The look of the film is thereby defaced, violating the original symmetrical widescreen composition created by the filmmakers.

Widescreen Editions

While the television broadcast and home video industries have traditionally altered the artistic integrity of widescreen motion pictures with the surgical process of pan and scan excision and superfluous picture insertion, there is one esteemed exception.

The video laserdisc segment of the home video industry offers the cinematic enthusiast-turned laserdisc aficionado —the laserphile—a fast growing selection of motion pictures presented on laserdisc in their original theatrical aspect ratio. These *Special Widescreen Editions* present the entire rectangular image across the center of the video screen, with black areas above and below. Some segments of the laserdisc industry use the term, *letterboxed* (a reference to an English residence mail slot), to call attention to their widescreen editions. *Widescreen Review* strictly adheres to the motion picture industry term, *widescreen*, preferred by directors and cinematographers.

Without panning, scanning or otherwise altering the visual composition, widescreen editions present a picture now smaller than a full screen *cropped* version but with the original aspect ratio image complete as photographed—the way the filmmakers intended the film to be seen and experienced.

Compositionally-correct editions help to not only preserve the emotional investment that people attach to a film, but the viewer's intuitive experience as well.

Laserphiles rejoice! Motion pictures on laserdisc in their original theatrical aspect ratios are here to stay.■

I Want To Know

The Studio Scoop

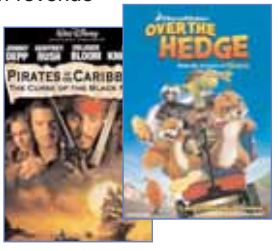
Rumors, Reports, & Ramblings

Jack Kelley

Welcome to The Studio Scoop (again), formerly Inside DVD. But times are changing, and the DVD is no longer the sole format. Instead of just providing you with information concerning product release dates—which can be conveniently and easily found on our Web site (www.WidescreenReview.com)—this monthly blurog (blurb + blog) is to give you behind-the-curtain information from an Insider's (or Not-So-Insider's, as the case may be) point of view.

Buena Vista

Disney (which is part of the Buena Vista family) CEO Robert Iger reported that his company earned $1 million in revenue through 125,000 movie downloads via iTunes. He believes this is just the beginning, and he expects Disney to make $50 million in revenue in the first year...and with no marketing expense. Perhaps with some of this revenue, an adult (10 years and over) one-day ticket to Disneyland can be made more reasonable than the current $63.00 price tag. Oh, the number one downloaded movie was *Pirates Of The Caribbean: The Curse Of The Black Pearl*.

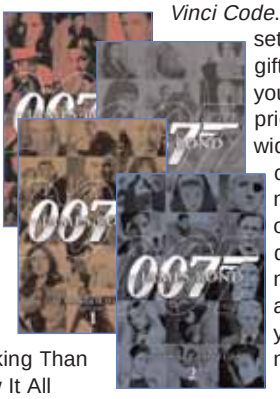


DreamWorks

Well, DreamWorks is taking piracy very, very seriously, so seriously that I have been unable to get a copy of *Over The Hedge*, which streets October 17, 2006, for review in Issue 115 (December 2006). Now, they did send me a disc of the special features, but it's hard to rate the picture and sound without, well, the movie's picture and sound. But I have faith in my studio contacts and am sure I will have a copy before deadline. Well, almost sure.

MGM

If you are a HUGE (and I do mean HUGE) James Bond fan, hang onto your martini glass, as I have four collections heading your way. Yes, four. And they are all titled *The James Bond Ultimate Collection*. They are categorized into Volumes 1, 2, 3, and 4. Volumes 1 and 2 will street on November 7, 2006, and Volumes 3 and 4 will street on December 12, 2006. Visit our Web site to discover which five two-disc movies are in each volume. MSRP is $98.89...per volume, of course.



New Line

"The Only Thing More Shocking Than How It Ended, Is How It All Began." And so reads the tagline for *The Texas Chainsaw Massacre: The Beginning*, which made its theatrical debut this past Friday, October 6, 2006. And for those of you who want to see the original film (so you really know how it all began), *The Texas Chain Saw Massacre*, Ultimate Edition, was released on September 26, 2006, and reviewed in Issue 114 (November 2006). Look for it in your mailbox mid-October.

Paramount

Paramount donated $2.6 million, ten percent of *World Trade Center*'s five-day take, to four New York charities honoring 9/11 victims; $1.3 million is going to the World Trade Center Memorial Fund. On December 12, 2006, *Word Trade Center* will be released in all three formats: standard definition DVD, Blu-ray Disc, and HD DVD. And, be assured, we will review all three formats once we can get them.

Sony Pictures

Okay, don't complain, I know I wrote about *The Da Vinci Code* last month, but I have something else to share with you. When Issue 114 (November 2006) arrives, you will see a review for the two-disc The *Da Vinci Code*. Did you know there's also a gift set? Well, there is. What does this gift set include? Well, I am so glad you asked. Your $80.95 purchase price will get you the two-disc widescreen special edition, the official functioning (no one likes the non-functioning ones) reproduction of the cryptex, and official reproduction of Robert Langdon's journal, which was produced from the authentic movie prop. I just wanted you to be well prepared before you made this DVD purchase.

20th Century Fox

On October 6, 2006, FoxFaith (Fox's Christian outreach label) theatrically debuted its first feature film, *Love's Abiding Joy*, based on Janette Oake's book series. It was most likely the numbers with the 2004 release of *The Passion Of The Christ*— $371 million in gross sales in the U.S. and 12 million DVDs sold—that encouraged Fox in developing this new label. For upcoming releases, you can visit www.FoxFaith.com.

Universal Studios

If you've gone to your local video store and noticed missing Universal movie posters, you are very, very observant. According to Susanne Ault of *Video Business*, Universal, as of September 26, 2006, stopped supplying in-store posters for films with a more than $60-million box-office take. Studio execs were not available for comment, but it is theorized that as theatrical windows become more and more compressed, studios have less and less time to consistently provide posters for retailers. I don't make this stuff up.

Warner Home Video

For those of you who loved *March Of The Penguins*, but felt it was missing some-

thing...and that something was penguins that could sing *and* dance, your wait is almost over. On November 17, 2006, *Happy Feet*, an animated musical, makes its debut at your local multiplex, and stars the voices of Elijah Wood, Robin Williams, Brittany Murphy, Hugh Jackman, and Nicole Kidman. Hey, where's Morgan Freeman? Okay, I just watched one of the five trailers, and I can tell you, those furry little creatures *can* sing and dance.

Independents

And here are some upcoming theatrical releases from a few independents: Lionsgate will release *Saw III* on October 27, 2006, so you may want to watch *Saw I* and *Saw II* in the next couple of weeks. No one likes to be unprepared. An all-star cast—Brad Pitt, Cate Blanchett, and Gael Garcia Bernal—is featured in Paramount Vantage's October 27, 2006 release of three-stories-all-in-one *Babel*. And from TH!NKFilm, we have John Cameron Mitchell's *Shortbus* arriving in general release on October 13, 2006.

Contrary to popular opinion, Research/Production Editor Jack Kelley is not responsible for any release date changes, price changes, or any other perceived errors contained within. He can be reached at jack@widescreenreview.com.