Co-operation for DVD Compatibility

It is not the format of the media, nor the name on the drive, that is the critical factor in DVD compatibility. It's the quality of media, and the need for co-operation throughout the industry.

The DVD industry as a whole - and by that I mean computer drives, recordable media, players, and home video releases - is flourishing like never before. All we have to do is to take a look at the DVD hardware, discs, and players practically flying off the shelves at our local computer or consumer electronics retailer to realise that DVD is now definitely the 'gold standard' for both the personal computing and the home entertainment markets.

Recently released figures from the Consumer Electronics Association confirm the continued exponential growth in sales of DVD-related products, as well as their rapidly increasing consumer popularity.

That's the good news. However, the bad news is that, in spite of this overwhelming success, recent news reports have also noted that compatibility rates for recordable and rewritable DVDs are still, unfortunately, short of the 100% compatibility mark. According to the industry definitions, a recordable DVD disc is deemed to be compatible if it is recorded on one device, and then can be played back flawlessly on another. In addition, a recordable DVD is considered to be compatible if its playback quality is equivalent to the playback of pressed discs with identical content. That makes sense, especially when we consider the situation with rewritable CD's, which are now universally compatible with all consumer and PC playback and recording devices.

In order to properly fuel the growth of the recordable DVD market, it is absolutely critical that we all achieve a similar level of interchange compatibility with recordable DVDs.

While significant progress has been made in order to improve the compatibility of newer drives and players, there is still a great deal of work to be done in this area. In a compatibility study conducted jointly by the Optical Storage Technology Association (OSTA), the DVD Association (DVDA), and the US National Institute of Standards and Technology (NIST), tests indicated that the compatibility rates are much higher for newer drives and players. Also, interestingly, it was found that the type of media, whether writable or rewritable, is not really a significant factor.

Another final, and thought-provoking, finding of the study was that the most critical factor in all DVD disc and drive compatibility comparisons is the quality of media, and not the format (DVD-R, DVD+R, DVD-RW or DVD+RW), or even the brand of drive. According to the test data, when high-quality DVD recordable discs (discs with Max Inner Parity Error of less than 280) are used, the compatibility rate today stands at 99%.

Nonetheless, the industry still has quite a bit of work to do in order to achieve the desired complete compatibility between DVD drives and media.

OSTA has been an instrumental force in these efforts by collaborating with various manufacturers around the globe so that we can all keep pushing the agenda on the DVD compatibility issue. The association formed a standing DVD Compatibility Committee exclusively for this purpose.

This committee has been working directly with the leading media and drive companies in order to develop an industry-wide solution based on a regular series of compatibility and physical tests. The results of which are provided to manufacturers for analysis and feedback. The group constantly examines a wide variety of media types, recordable DVD drives, DVD-ROM drives, and consumer DVD players, and it defines objective testing methodologies and parameters aimed at assisting manufacturers in identifying and fixing possible problems between specific brand media and drive models.

As a next step in these tests, OSTA is continuing its work with both the DVDA and the NIST to assist manufacturers in the ultimate goal of achieving universal compatibility. A second phase of compatibility testing, which is now under way, will analyse the performance of the top DVD recordable drives and players now widely available to consumers, as well as the latest high-speed media. OSTA plans to release the results of this testing phase in the second quarter of 2004.

The compatibility testing underway by OSTA, DVDA and NIST is a positive step forward in resolving the compatibility issues, but these organisations cannot go at it without assistance from within the industry.

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There is a serious need to have greater involvement from a much wider representation of companies throughout the entire DVD industry. Participation from all drive and media manufacturers will facilitate the testing of additional DVD products against industry benchmarks. Through this process, which is conducted entirely confidentially, specific models of drives and specific media that may have compatibility issues can be identified, and the relevant information provided to the manufacturers. This will then enable them to further fine-tune their processes, serving to improve industry-wide compatibility.

So, how do we all get there? For starters, let this commentary serve as a worldwide invitation to all DVD drive and media manufacturers, who are not currently involved, to join in the compatibility efforts as soon as possible. Second, it is imperative that OSTA, DVDA, and NIST aggressively move forward with its additional testing, while still continuing to solicit the participation of other drive and media manufacturers. Again, by having more companies and more products included in the benchmarking process, the better off the industry - and all of us - will be.

To ensure the highest possible level of satisfaction for the consumer, the whole industry must work closely together to achieve the highest possible level of compatibility between recordable and rewritable DVD discs, along with a diverse range of players and DVD drives. Fine-tuning the manufacturing processes to achieve universal compatibility can only be a win-win situation for consumers and the companies involved, and everyone can only benefit as a result.

As Benjamin Franklin once said, "We must indeed all hang together, or, most assuredly, we shall all hang separately." This is particularly pertinent in the DVD sector. Drive and media manufacturers need each other now, more than ever, in order to solve the remaining compatibility issues.