

Full-motion video - putting more "i" in CD-I for a new style of interactivity

- Interactive movies
- Windows over video
- "Scanoramas" in portrait and landscape
- "Endless loop" sequences
- Time-adjustable multiplane transitions
- Multi-channel audio
- High-compression still-pictures
- Rapid-access play controls with simple "Point-and-click" action

So you thought that Full-Motion Video was simply full-screen moving pictures from a CD-I disc? Not at all. The whole point about FMV is its total interactivity. Here is a complete repertoire of innovative interactive features. It opens the way to exciting new CD-I titles, full of fascinating interactive ideas.

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CD-i

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Full-motion video - the featu

The features of FMV are distinctive, not to say unique. To CD-I Title developers and viewers alike, they offer new and exciting opportunities and experiences.



Seamless Jump

Here are interactive movie sequences where the viewer dictates the course of the action. Imagine, for example, watching the same story from different, or even opposing, angles or aspects; or choosing a particular car for a Formula 1 Grand Prix - and deciding what to do as things happen; or puzzling over a mystery when your choice determines the denouement. But this is no more than a start: these few examples can only hint at the full potential of Seamless Jump in new interactive applications.

Seamless jump is unique in motion video. It achieves true real-time branching down alternative paths; and seamless convergence at the end of them.

Play Control

The FMV control bar gives total control over the movie sequences. It appears at the click of an action button. And it offers all the familiar video-type controls: fast forward and reverse, pause, play, stop, continue, slow motion, freeze and single step. Pause displays a superb still picture - far superior to a videorecorder still. And in freeze mode, the picture can be accompanied by the sound track.

Moreover, the FMV control bar incorporates something completely new; random scan with time scaling.

A continuous bar underlines the other controls. It portrays the playing time of the sequence. Click on any point along the bar, and play jumps to that time in the sequence. No tracking, no distortion, no delay; its so easy - and its all over in a split second.

As a final touch of finesse, the FMV control Bar has its own built-in Help function. One simple point-and-click action, and the control bar functions are explained - in a choice of languages.

Window over Full Motion

Variable-size windows focus attention on the multiple-choice potential of Full-Motion Video. Opening up or moving a window will select different movie sequences. A swivelling "periscope", for example, could home in on different actions at all points of the compass. From the street outside a stadium, a viewer could zoom in to a seat in the stands, or into the changing rooms.

Window over Full Motion has other dynamic uses too. Think, for example, about shooting at moving targets.

Unlike other video systems, there is no waiting between the movie sequences in the windows. The changeover from one to another takes only a fraction of a second.

Video Loop

Seemingly endless FMV sequences are easily produced by looping short video passages. Furthermore, these can be played independently, without tying up the disc. Simply load them in to the player memory, and play them from there.

Video loops are good "Teasers". They attract the attention of casual audiences, to introduce particular titles. Text can be overlaid to supply information, or issue an invitation, to prospective customers.

Image Ratio Vertical and Image Ratio Horizontal

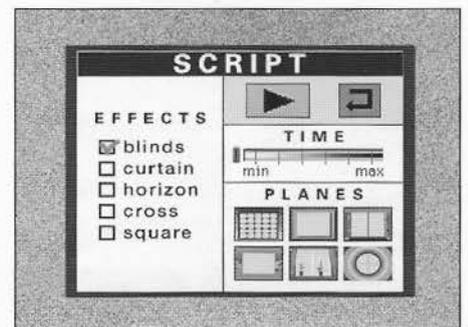
Here are novel "Scanorama" effects. Imagine a panoramic movie, stretching right round a full 360°. To see it all, you



have to scan it. Image Ratio Horizontal does exactly that. The control could be a submarine periscope, or a car dashboard with steering wheel, in a static display frame. Think of motor racing, or walking round the roof of the Empire State building.

Image Ratio Vertical offers the same "Scanorama" facility. But this time, the scan is vertical. Imagine scanning up a mountain to see all the wintersport

activities. Or flying a helicopter up the wall of a skyscraper. This is a feature no other video system begins to offer. It is only possible with digital motion video.



Other Planes

"Other Planes" combines FMV with multiplane overlays and the complete array of CD-I visual effects. The transition time is adjustable. And the results can be really fascinating.





Multilingual

One movie sequence can be accompanied by multiple audio sound tracks. The highly-compressed MPEG digital sound is all carried in one data channel. Different sound tracks can carry different languages, different levels of information, or other sound packages. The actual number of sound tracks is traded off against the area of the display taken up by the motion video.

The Stills Gallery

Here is a completely unsuspected feature of Full-Motion Video: a high-density still-picture storage capability. The colour and resolution quality of FMV stills is high - directly comparable with the normal CD-I DYUV stills. The same techniques can be used to refine the source material. But FMV stills are coded in the highly-compressed CD-I MPEG Full-Motion format. A lot more FMV stills than equivalent DYUV stills can be stored in a given amount of disc space.

Picture and sound quality

The quality of FMV's digital pictures and sound set a new standard for video playback systems. The pictures are characterized by razor-sharp resolution and exceptional colour purity. And the sound accompaniment is crystal-clear.

Each one of FMV's features reveals interactive aspects that you could hardly have anticipated. As an application developer, you have a new toolbox for interactive title development. Just imagine what you can do with it. Just think of the new experiences you can offer to the growing world of CD-I enthusiasts!

There's much more to FMV than just motion video.

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