

Higher Frame Rates for Future TV Systems

- ▶ As resolution increases, to maintain the dynamic resolution, the frame rate also needs to increase.
- ▶ As these demos show, this is even advantageous at HDTV, let alone for UHD TV.
- ▶ To sharpen motion, you can also shorten the camera shutter, but at conventional frame rates this leads to judder.
- ▶ Frame rates **above 100 fps** (frames per second) enable the eye to fuse motion*, even with a short shutter opening.
 (*NHK Science & Technical Research Labs at DCS2011, Las Vegas April 2011)
- ▶ 120 fps is already standardized for UHD-1 (4k) and UHD-2 (8k), but a multiple of 50 fps will be needed in Europe, due to lighting flicker and standards conversion/compatibility issues.

Standard Definition

A

Static image

A

Dynamic image

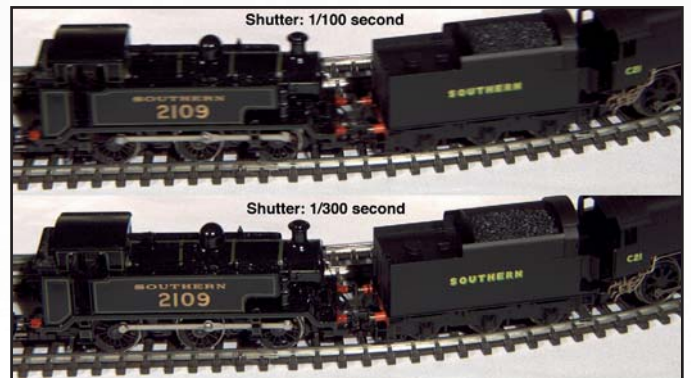
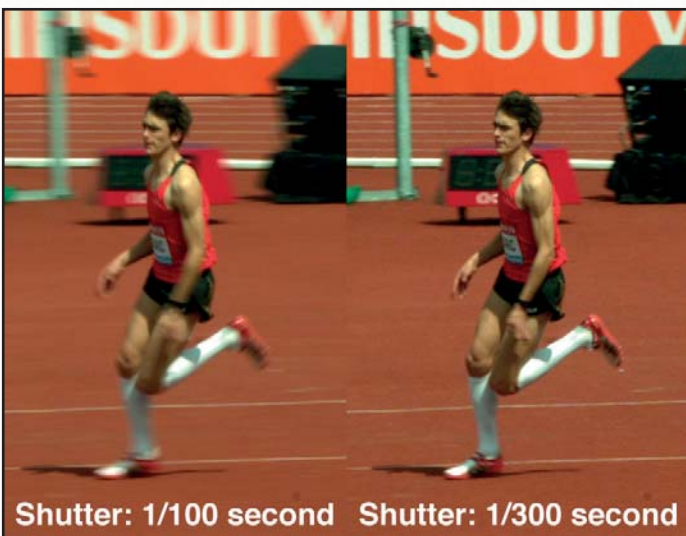
High Definition

A

Static image

A

Dynamic image



Conference Paper: Higher Frame Rates for Television Cutting Edge 2 - Enhancing & Streaming Immersive Images

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