Subject: scanlines
Posted by Robert Henderson on Sun, 22 Aug 2004 23:09:46 GMT
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What is the definition of scanlines? Is there a standard? I was told that standard broadcast television has a defined number of lines top to bottom but side to side wasn't actually defined. It is set by film, broadcast and receiver quality and that's why some things are crisp and others are fuzzy. I know computer monitors have a set resolution but I am wondering about TV. What is the broadcast standard, and what is it for HDTV? Robert

Subject: Re: scanlines
Posted by BLS on Tue, 24 Aug 2004 02:49:22 GMT
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The standard for NTSC is 525 scan lines, 480 of them being visible. They are interlaced, meaing that every other one is visible on each frame. You are correct that each scan line has variable resolution because it is analog. There isn't a pixel defined in NTSC, this has come about from the digital revolution. However, there is a broadcast bandwith limitation that caps the maximum NTSC resolution to about 640 x 480 and it can only approach this, rarely able to achieve this.HDTV is capable of up to 1920 x 1080 resolution, which is 8 to 10 times higher than NTSC. This is an interlaced format, so every other line is displayed for each frame. HDTV broadcasters can also choose from two other progressive scanline formats, meaning each scanline is displayed for each frame. HDTV broadcasts can be done in 480 or 720 progressive lines. A progressive 480 line image is much sharper than an NTSC broadcast, but it is not considred to be "true" HDTV. Progressive 720 has 720 horizontal scan lines and is considered to be true HDTV. 720p can many times rival a 1080i picture, which is 1080 horizontal scan lines displayed as an interlaced image. This is because of the sharper, and more accurate picture 720p displays, even though 1080i has many more scan lines and a much higher resolution.

Subject: Re: scanlines
Posted by A/V Guru on Sun, 05 Sep 2004 18:25:08 GMT
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Here is a good explaination of what you're talking about, with pictures to demonstrate it.
Progressive vs Interlaced