Subject: Digital Optimized
Posted by GarMan on Mon, 07 Mar 2005 18:27:31 GMT
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Last week, I did something that I haven't done in over five years in my other hobby of photography: buy new equipment. Ever since I stopped obsessing over equipment over five years ago, I found myself enjoying shooting a lot more, and was also better at it. However, my abstinence from equipment purchase ended when I finally decided to make to move to digital.Since my manual focus Canon FD system is incompatible with any D-SLR on the market, it meant I had to purchase lens(es) in addition to the body. After a bit of research, I notices that the latest trend in the lens market is a category call "digital optimized" - lenses optics that are optimized for digital camera, but can also be used for film. These lenses have higher quality levels "to meet the demands of digital cameras."My first thought was "Oh no, another piece of marketing B.S. designed to capitalize on the digital market. I mean, optics are optics, right?" Sure, most digital sensors are smaller than the full frame of 35mm film, so lenses that are designed only for use with digital cameras can be smaller, lighter, and placed closer into the camera body. But why should optics quality be any different? Well, after a bit of reading, it seems to be some legitimacy to this.Apparently, digital sensors are less forgiving and more difficult to work with than film surfaces. For example, a film surface can pick up light coming at it at all different angles, while individual sensors on a digital array, which sits recessed to surface, can only pick up light that comes in more or less perpendicular to the surface. Therefore, "digital" lenses have to be designed so that light comes into the camera perpendicular to the sensor surface.Another difference is that the surface of the sensor tends to be a lot more reflective than film surfaces. To address this, the back element of "digital" lenses have a higher grade of anti-reflective coating so that light does not bounce back and forth inside the camera. There a list of other differences that I wouldn't go into, but the long and short of it is that digital sensors are harder to work with than film and require lenses of higher quality to make up for these shortcomings. Photographers who uses these "digital" lenses with film can only benefit from it.So, what does this have to do with audio?!Digital source has been around for over 20 years. In that time, I've seen more than my fair share of components and speakers "designed for digital." A lot of it was during the hype of hi-rez digital sources requiring hi-rez amps and speakers. I've always blown these off as marketing gimmicks. But are they? Is there anything inherent in digital source that requires an amp or speaker to be designed differently?What about the introduction (and eventual acceptance) of digital amps. What would a set of speakers that are "digitally optimized" for these amps look like?Gar.