Technical Article: Digital Audio Cables Reflections and DSPs

Mike Dennison, Technical Expert

This article is expand upon earlier discussions about digital audio cables and their reflections. The reflections are a function of the digital audio cable's quality as much as possible, but numbers are bound to be quoted. Digital audio cables are not the only place where reflections happen, but they are the most common.

Suppose a digital audio transmitter (source) and receiver (sink) are connected by a transmission line (cable). The driver and receiver are connected to the cable through a 75 ohm resistor. The transmitter's output is a digital signal, the receiver's input is a digital signal, a phase locked loop is bandpass filtered from the source's output and is used to clock the receiver's input. The source's output is the source's output, the output of the source's output is the output of the source's output. The output of the source's output is the output of the source's output. The output of the source's output is the output of the source's output. The