
Subject: Re: Can't reproduce a square wave (some can)
Posted by [Tom Danley](#) on Wed, 17 Mar 2004 21:09:51 GMT
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HiThe reason a square wave has long been used in Ham radio and electronics in general as a test signal is because on an oscilloscope, in order to look "good" a flat phase and amplitude was required to about to a factor of 10 X both ways from the fundamental. It is an easy signal to see and any condition other than zero degrees phase and flat amplitude will not preserve this or any other complex waveshape. Yes, it is true a Manger can reproduce a square wave (by eye as above) or other complex signal midband, I have measured one. (on the other hand they are also high in distortion). Perhaps a different way to look at it that the speaker has essentially "no" spreading in time of the signal or zero group delay. You would think that a goal would be to preserve the waveshape but for the most part, speakers do not and for a number of reasons. Some people are apparently sensitive to this, others not. Cheers, Tom Danley Nice forum Wayne!
