

## Re: randomized white noise = white noise?

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*Source:* <http://sci.tech-archive.net/Archive/sci.electronics.design/2006-05/msg04524.html>

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  - *Date:* 26 May 2006 16:26:12 -0700
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Also, note that if you scale the whole set of values (0.099046, 0.296516, 1.052691, 0.1848) by the same amount, it's equivalent to scaling WHITE by that amount. So you may be able to make some of those coefficients easier to deal with at the same time you do the scaling. If you scale the whole set the same, the filter frequency response will stay the same and only the amplitude will change. Don't change the coefficients applied to b0, b1, b2 or it will change the frequency response. Beware that you will NEED to keep b0, especially, as a 16 bit number at least. 8 bits will almost certainly NOT be enough for it, especially as you scale the input smaller. (Welcome to the world of digital filters with poles at a tiny fraction of the sample frequency—poles close to  $z=1$ .)

Cheers,  
Tom

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