Sample Champion - Application note # 6

MLS and pink filter. Why use it?

In some circumstances, it could be useful to have a pink noise generator, especially when an octave or third-octave frequency analysis is required. Sample Champion can pink-filter the MLS signal. Here below there are some examples (with "loop back" configuration).
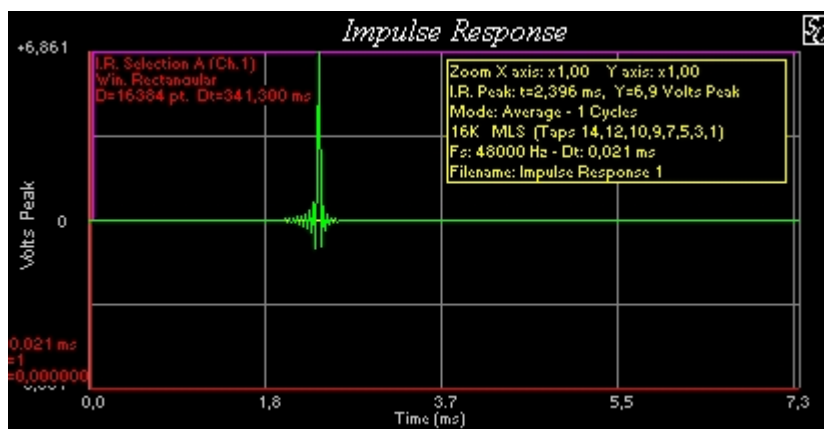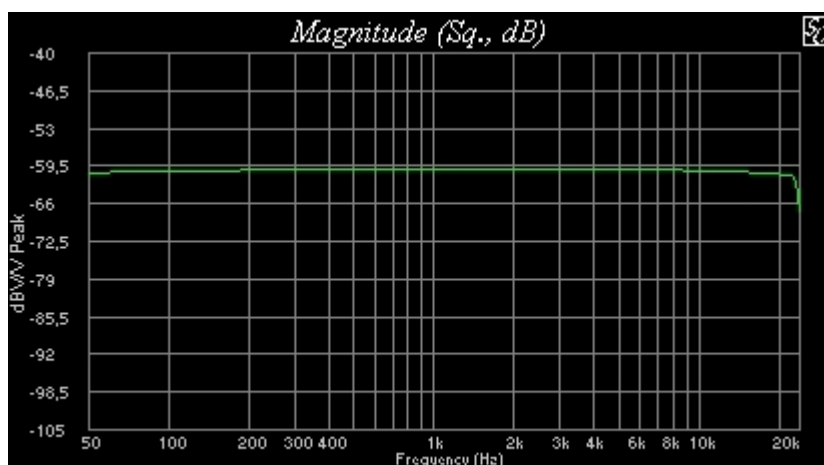

Figure 1 - "Flat" impulse response

Figure 2 - "Flat" frequency response from the
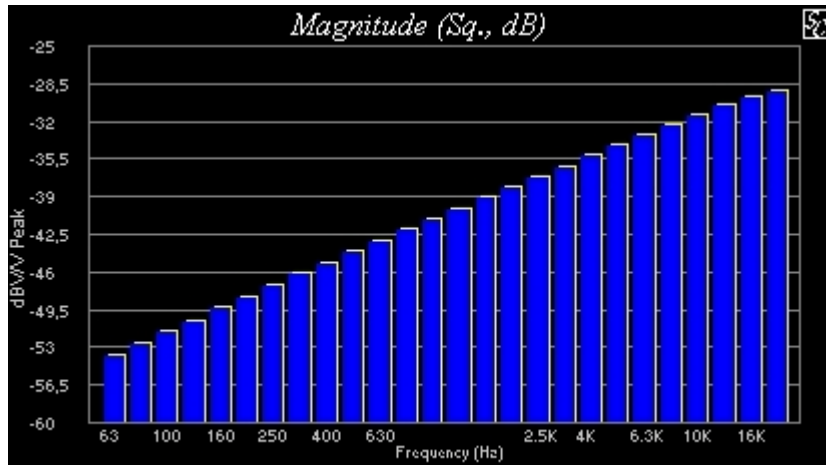impulse response plotted in figure 1

Figure 3 - Third octave analysis of the "flat" frequency response plotted in figure 2; the difference between adjacent 1/3 octave bands is equal to 1 dB
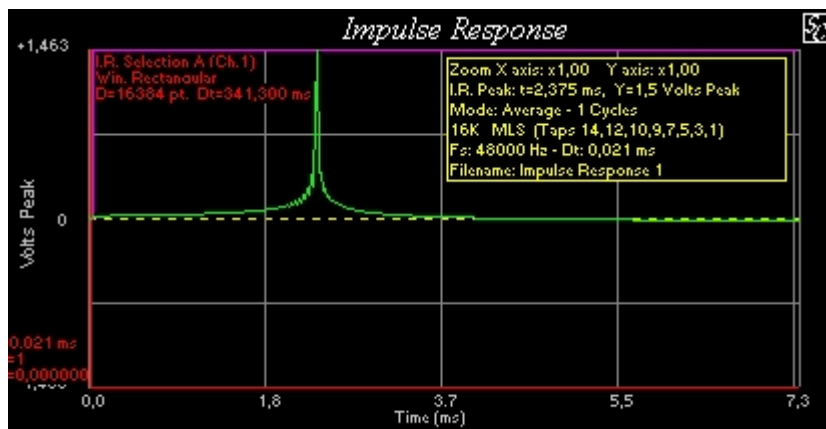

Figure 4 - Impulse response measured in the same conditions of figure 1, but using a pink-filtered MLS signal
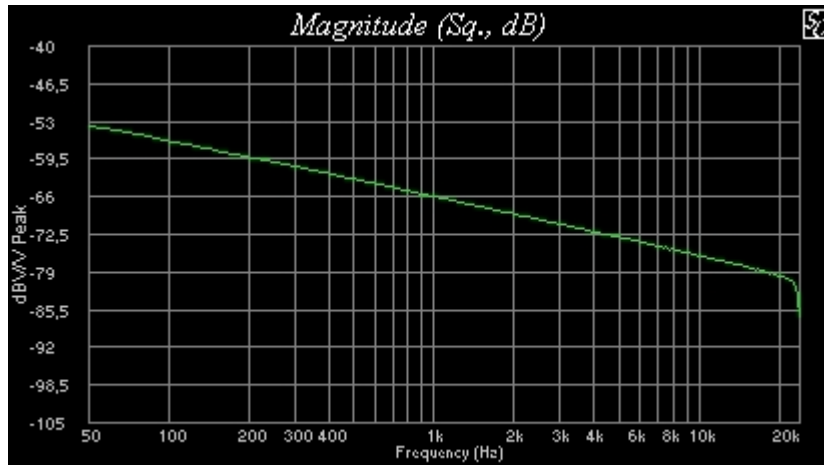
Figure 5 - Frequency response from the
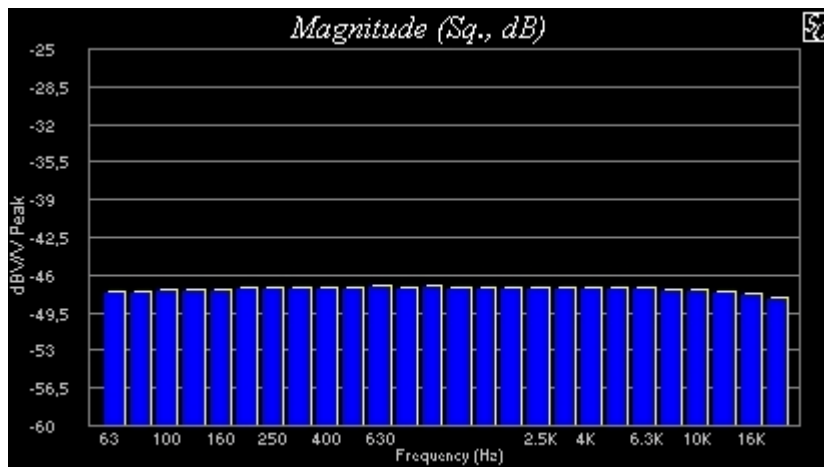impulse response plotted in figure 4

Figure 6 - Third octave analysis of the frequency
response plotted in figure 5

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