
Subject: Digital filter question

Posted by [larkum](#) on Tue, 01 Nov 1994 11:45:04 GMT

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I can't understand description of DIGITAL_FILTER in the PV-Wave manual. I have some data with an annoying 50Hz mains signal that I'd like to try to filter out. The manual talks about the Nyquist Frequency as $1/2T$, where T is the time elapsed between data samples.

Well, I have data sampled at 20 kHz, so as far as I can tell, the Nyquist frequency for this data is 10 000. Am I right? Now what? (besides read a book on digital signal processing). What should my low and high frequencies be to set a bandpass filter around 50 Hz, expressing them as "fractions of the Nyquist frequency" as "numbers between 0 and 1".

Thanks anyone,

Matthew.

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