

Re: Measuring the noise floor

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On Wed, 02 Mar 2005 20:49:29 GMT, PaulCsouls
<paulcsouls@worldnet.att.net> wrote:

>
>*Thanks. I didn't know about the low noise setting, I'll have to check*
>*the manual again. The resolution bandwidth with the 3588 was 17k. The*
>*4195A only lets me set 10k and 30k in that range. Though I would*
>*expect to see a discrepancy between the data from the 3588 and 4195A,*
>*the lack of change between the on and off conditions worries me about*
>*the condition of the 4195A. The preamp is probably what I need. I'll*
>*look into renting one of those when the 4195A come back from cal.*
>
>*Thank you*
>
>*Paul C*
>

To get to the low noise mode, press the Receive Attenuation button.
You will have a selection of
IF RNG Normal
IF RNG Low Distortion (only in spectrum mode)
IF RNG Hi Sensitivity

Low distortion and high sensitivity mode will give you a better noise floor. I'm a bit baffled by your bandwidth setting limitations. The 4195 allows you to use bandwidth settings down to 3 Hz. Might take a few days to make the measurement at 3 Hz depending on your setup.

What is your basic setup? Freq range, mode, circuit impedance, ...
If your doing noise floor measurements, you want to use the spectral density mode (dBuV/Hz, dBm/Hz, uV/rtHz) which reports noise in a 1 Hz bandwidth.

Mark