



Power Spectrum Measurement.vi

C:\Program Files (x86)\National Instruments\LabVIEW 2013\examples\Signal Processing\Waveform Measurements\Power Spectrum Measurement.vi

Last modified on 7/2/2013 at 1:54 AM

Printed on 3/16/2017 at 3:46 PM

Connector Pane

Power Spectrum Measurement.vi



Computes the averaged power spectrum of a simulated input signal. This example allows you to specify various averaging modes for your measurement, such as RMS averaging, vector averaging, or peak hold, as well as the number of averages. You can observe the influence of these averaging parameters, typically on the noise floor, and notice that vector averaging requires the use of a trigger in order to lower the noise floor without lowering the fundamental along with it. You also can specify the type of window to use in this measurement, such as a Hanning or Flat Top window.

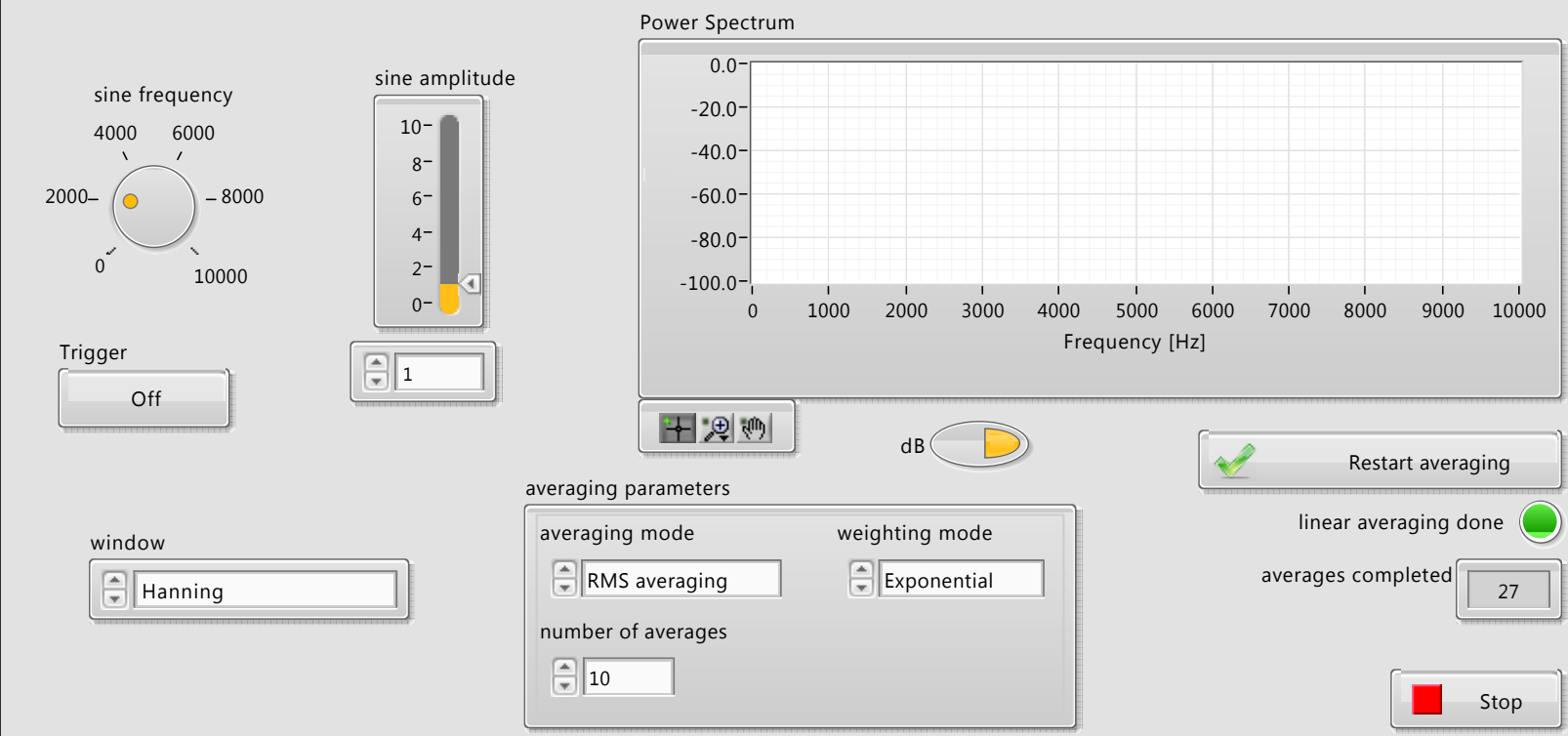
Front Panel

Overview: Demonstrates the use of the **FFT Power Spectrum and PSD VI**.

Requirements: LabVIEW Full Development System

Instructions:

1. Run the VI.
2. Change the **sine frequency** and see how the averaged **Power Spectrum** results change.
3. Change the **averaging parameters** to explore various FFT averaging and weighting modes.
4. Note that if the **averaging mode** is "Vector averaging", **Trigger** should be ON so the sine signal is the same phase for each record.
5. Click **Stop** to stop the VI.





Power Spectrum Measurement.vi

C:\Program Files (x86)\National Instruments\LabVIEW 2013\examples\Signal Processing\Waveform Measurements\Power Spectrum Measurement.vi

Last modified on 7/2/2013 at 1:54 AM

Printed on 3/16/2017 at 3:46 PM

Block Diagram

