

## EMU0202



<http://www.emu.com>

### Features

- High-Speed USB 2.0
- 2 channels input and output
- Up to 192K sampling rate in full duplex
- Analog bandwidths 96kHz
- 24 bit resolution.
- Microphone preamplifier
- USB Bus powered

### Lowlights (supported by the EMU0404)

- No digital interfaces
- No phantom power for microphones

### Setup

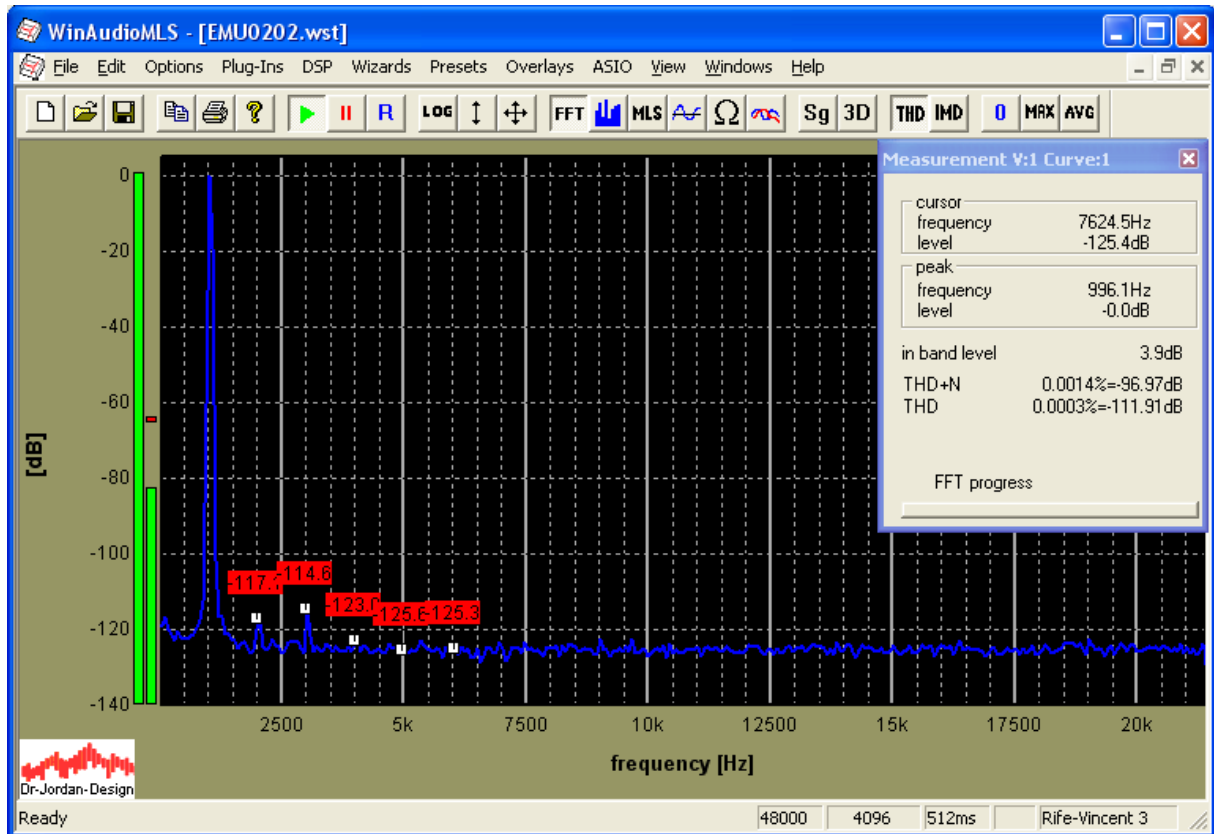
- WinAudioMLS PRO EX
- ASIO 24bit/192kHz plug-in
- 64bit FFT plug-in
- Sweep Tracking plug-in
- Input and output of channel 1 connected with a balanced cable

## Distortion and Noise Analysis

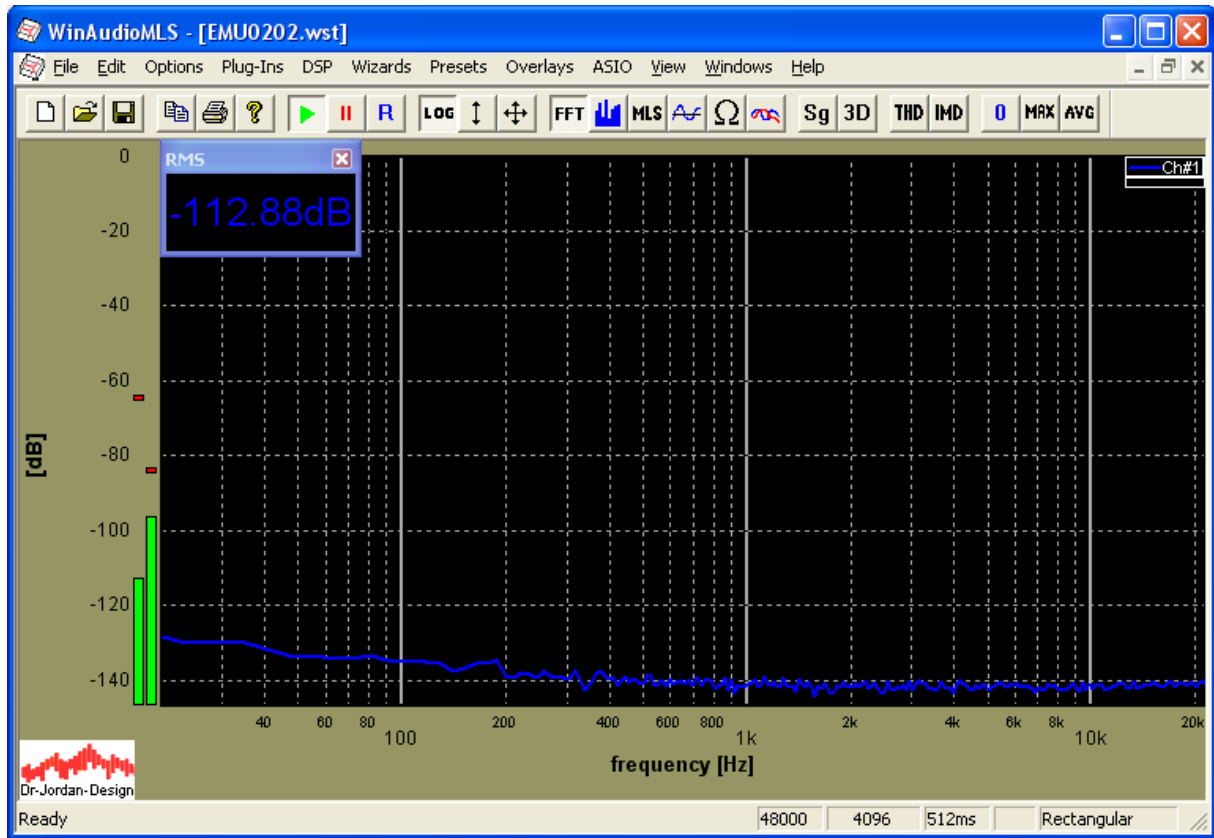
Input and output connected via line inputs.

Input frequency is 1kHz.

Sample rate is 48kHz



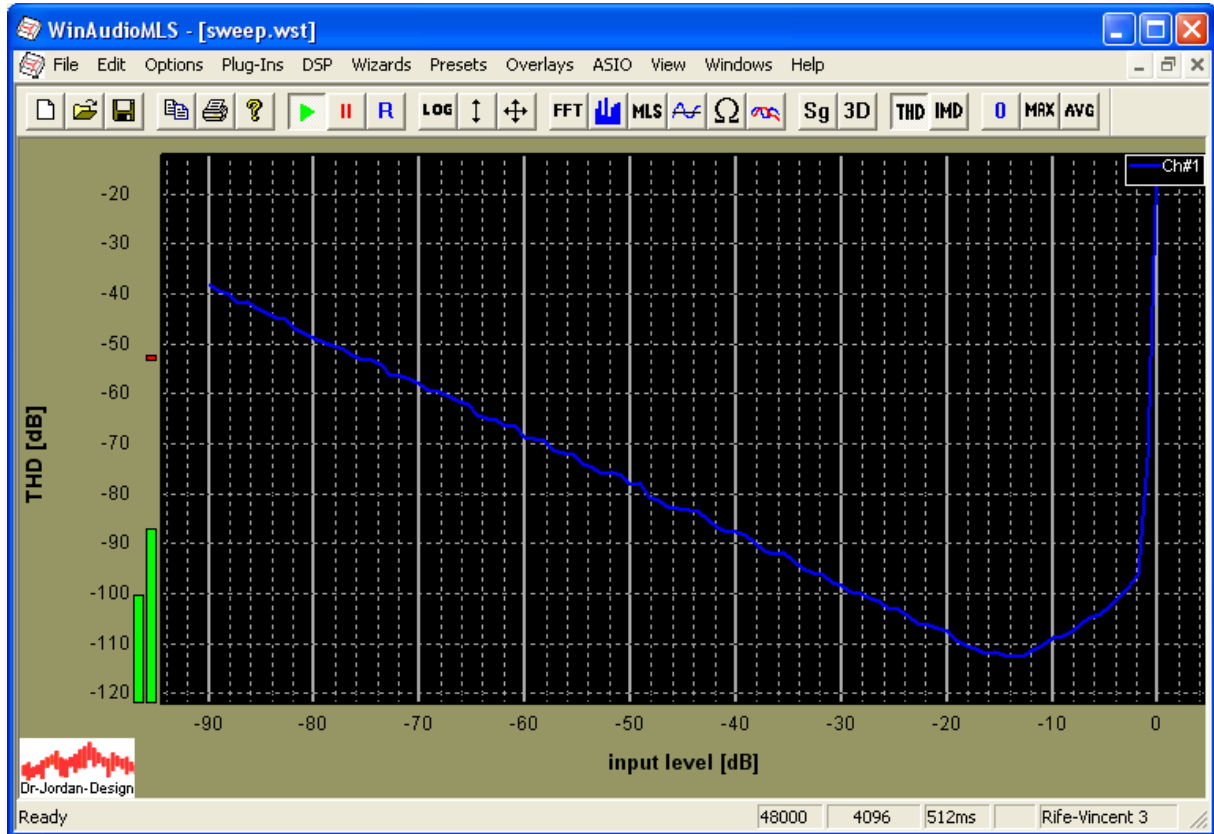
## Input grounded



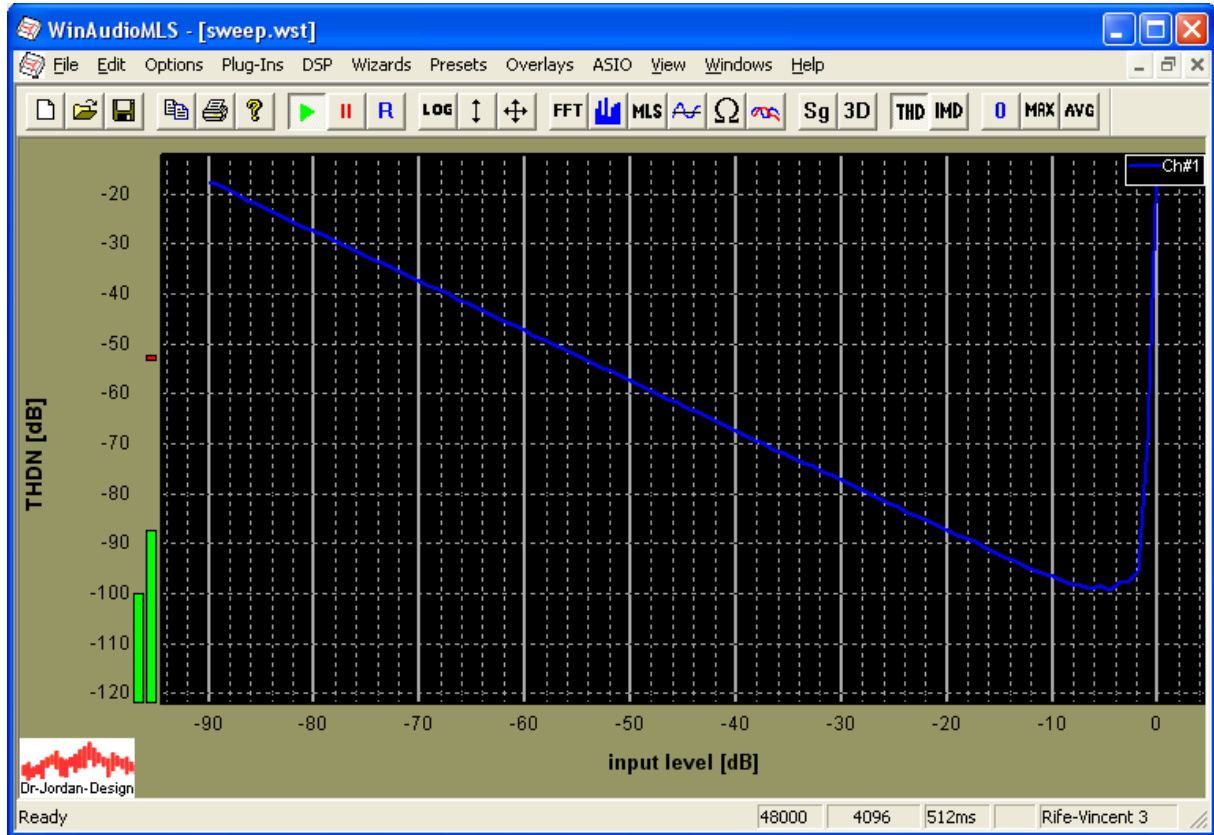
Dynamic range is almost 113dB

## THD vs digital level

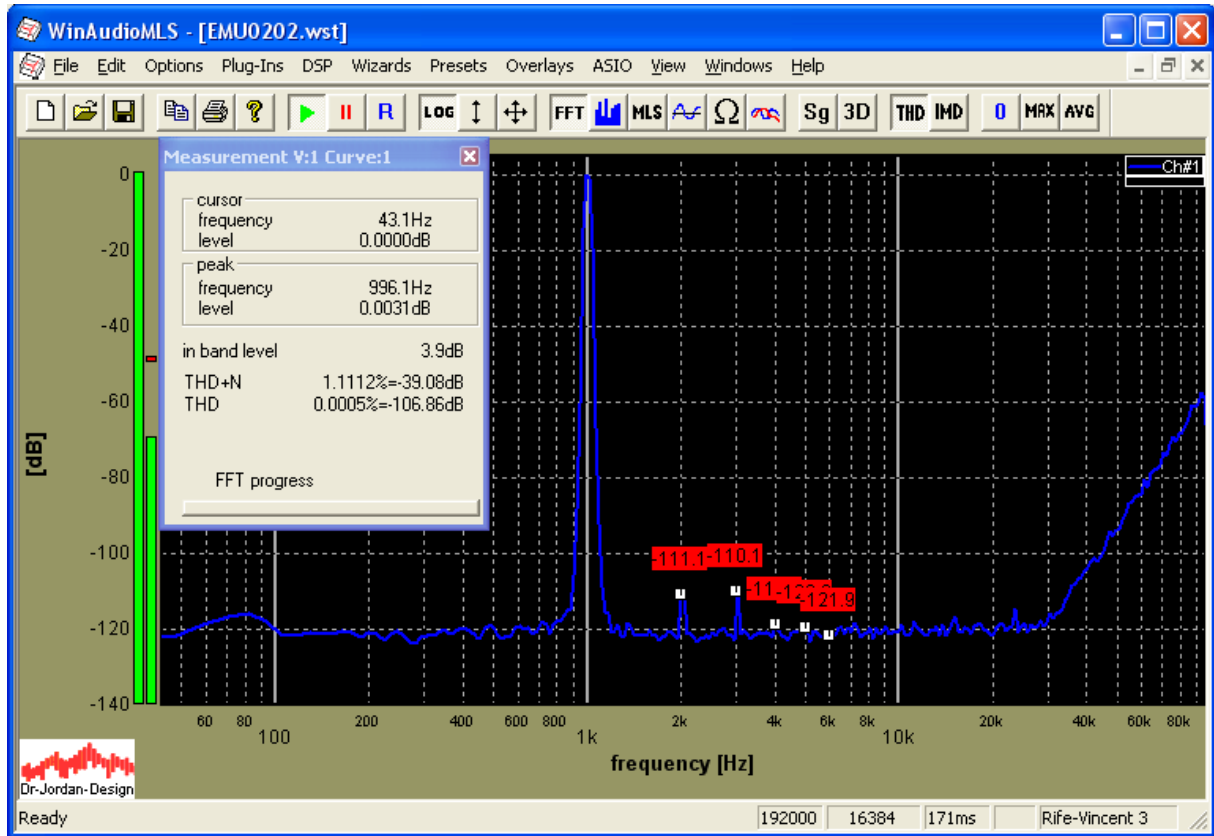
Input gain set to min



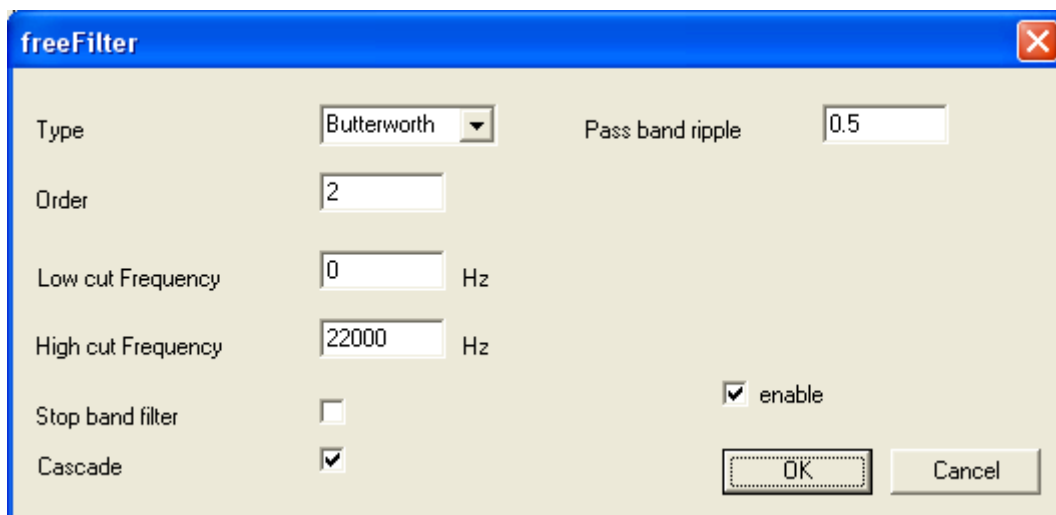
### THD+N vs frequency

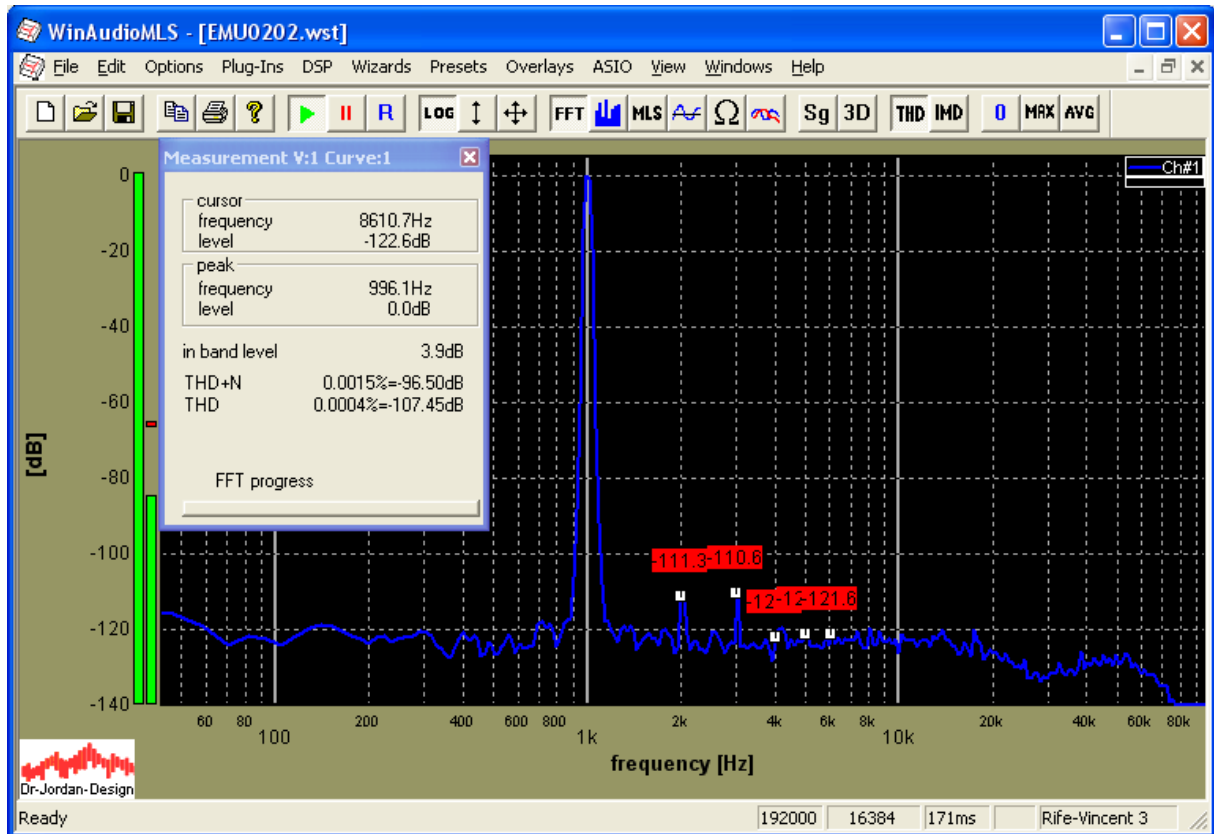


## 192kHz Distortion



Significant aliasing components above 30kHz which reduces the wide-band THD+N.  
 We can remove such components with a digital low-pass filter.





## Frequency response at 192kHz

