The MADDE vowel synthesiser

Constructed by PhD. Svante Granqvist, KTH

Partials of the voice source with normalised amplitudes. You can grab each with the mouse to vary its amplitude. (Here, the fundamental has been enhanced by 8 dB.)

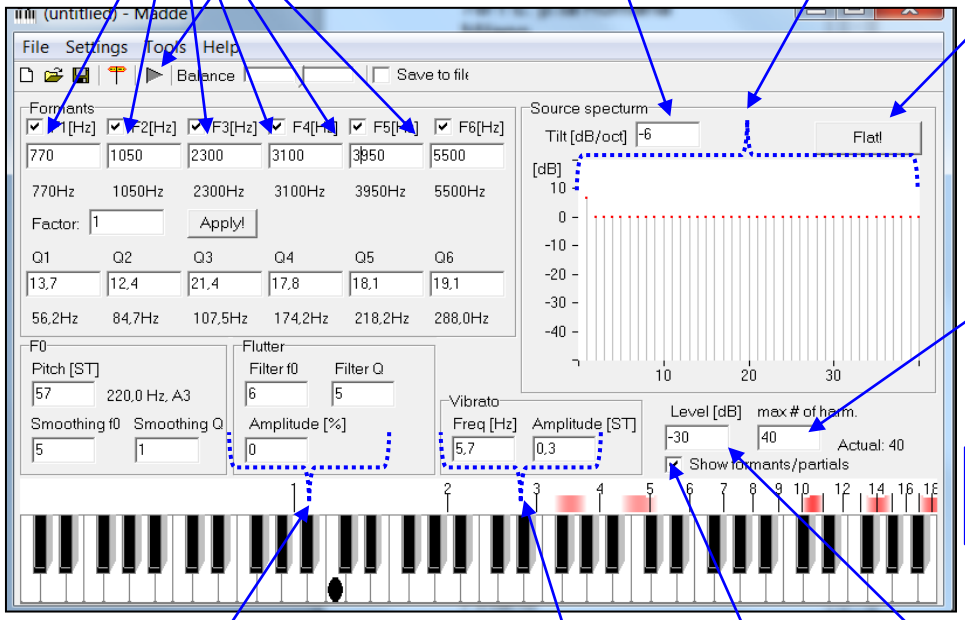
In these windows you see and can write the formant frequencies. The two lowest determine vowel quality, the higher personal voice timbre

Play

Slope of source spectrum envelope. Varying it sounds as variation of vocal loudness

Checkbox for returning to standard source spectrum envelope

These Q values determine the bandwidths of the formants. Normally you don't need to change them



MIDI number of pitch played

Constants determining speed of pitch change

Number of voice source partials

Pitch locations of partials (black) and formants (red)

Level of output signal in dB

Constants determining amplitude of random variation of fundamental frequency

Rate and extent of vibrato

Checkbox for displaying frequencies of formants (red) and partials (black)