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Introduction

Tune! It is an innovative program designed to tune musical instruments on a PC using a microphone or directly connecting the instrument (e.g. electric guitar) to the PC's soundcard.

Tune! It automatically detects the pitch of the input signal, highlights the corresponding note and shows its deviation from standard tuning. Optionally the spectrum of the input signal can be displayed from which the harmonics of the signal can be identified.

Menu Command Summary

File :

- Exit : Closes Tune!It

Settings :

Opens a dialog box containing controls to set tuning parameters and adjust Tune!It to the PC's hardware configuration. The following parameters can be set :

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Spectrum Magnification

Options :

Selects one of the two modes offered by Tune!It :

- Chromatic Tuner (default) : fine tuning display
- Spectrum : shows graph with harmonics

About :

Contains Info about Tune!It

Chromatic Tuner

This is the default mode which is used for fine tuning . The chromatic tuner detects the pitch of the input signal and displays the corresponding note and deviation from standard tuning (based on A = 440 Hz). The note will be highlighted in red and its deviation is shown in percent in form of a floating red rectangle. The note is exactly in tune if the red rectangle shrinks to a line over the 0 percent mark.

Note : Make sure to play only one note at a time otherwise incorrect readings may occur (e.g. on a guitar plug only one string and mute remaining strings).

Spectrum

This mode can be used to explore the harmonics of the input signal. The spectrum is a graph showing the amplitude of the frequencies contained in the input signal. The peaks in the graph represent the harmonics of the signal. The frequency scale also shows the corresponding note scale so that the harmonics can be easily identified. The Spectrum frequency range can be adjusted in the Settings dialog box (refer Menu Command Summary) .

Note : This mode requires a lot of computation and a 486 with mathematical coprocessor is recommended to achieve reasonable real time updates of the graph.

Sampling quality

Note : Tune!It version 1.0 only supports sampling rate 11025 with 8 bit resolution.

Sampling period

This parameter determines the time and therefore amount of samples to be processed between consecutive updates of the chromatic tuner or spectrum display. Short sampling periods mean less accuracy but faster display update, higher sampling periods improved accuracy and slower display update.

Tuner Sensitivity

This parameter sets the threshold for the signal amplitude, which allows you to adjust the tuner to the strength of the signal. For strong signals you can set the parameter to low which will prevent any false readings during signal pauses.

Note : Settings of this parameter affect only the Chromatic Tuner.

Pitch Adjustment

This parameter will adjust the pitch of tuner up to one semitone up or down (+/- 100 percent). This may be required for individual tuning.

Spectrum Frequency range

The spectrum can display frequencies between 20 Hz and 4000 Hz. This range can be adjusted to individual needs. Lowering the high frequencies also means less processing and will update the graph faster.

Spectrum Magnification

With this parameter the spectrum graph can be enlarged up to 10 times. Use this feature for weak signals.

ON / OFF Button

Clicking the ON button activates the tuner, which will cause the input signal to be processed constantly and the results to be displayed on the screen depending on the currently selected mode.

Clicking the OFF button deactivates the tuner.

Note : The tuner must be deactivated in order to exit Tune!It or switch to another application.

How to use Tune!It

Make sure your microphone or instrument lead is properly connected to the soundcard.

Select either Chromatic Tuner (default) or Spectrum from the options menu.

Activate the tuner by clicking the ON button.

Fine tune your instrument selecting the Chromatic Tuner or explore the harmonics selecting the Spectrum.

Deactivate the tuner by clicking the OFF button.

How to register

By registering this program you will receive the latest version (with a full tuning range from 20 Hz on), support and notice of any future upgrades.

Registering Tune!It is US\$15.00 plus US\$5.00 for shipping and handling outside Australia.

You can register

- by sending a cheque or (international) money order to

D Volkmer
5 Forbes Place
Allambie Heights NSW 2100
AUSTRALIA

or

- via CompuServe's Shareware Registration forum (GO SWREG)

Author : D Volkmer
CompuServe ID : 100231,2234
Program Title : TUNE!IT 1.01
Registration ID : 5445

