SouthPitch

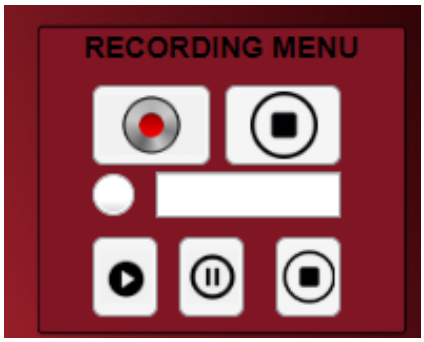
User Guide

USER INTERFACE (GUI)

In the upper right area you will find the following 3 options:

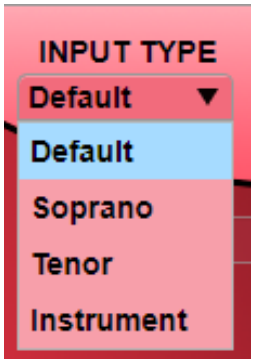
- **Import.** With this option you can load an audio signal stored on your device. Accepted audio formats are wav, mp3, aif and ogg.
- **Export.** This option allows you to export the audio signal to your device in wav format.
- **Record audio.** This option allows you to make the recording menu visible, the interface is as shown in the following.

RECORDING MENU



The recording menu allows you to record an audio signal through the microphone that is connected to your device. To start recording you need to press the record button (upper red circle) and to stop you need to press the black square icon. Once the audio is recorded, it can be played using the buttons at the bottom of the recording menu.

INPUT TYPE



The "input type" parameter defines the type of audio signal you are working with. Each option allows a range of pitch frequencies:

- Default. $[80,1300]Hz$
- Soprano. $[200,1300]Hz$
- Tenor. $[80,500]Hz$
- Instrument. $[30,4000]Hz$

If you don't know to which range your audio signal adapts, it is recommended to leave "default".

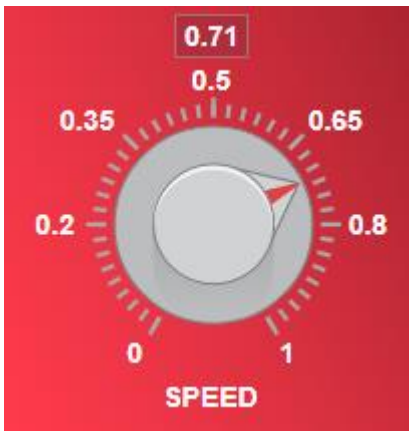
KEY & SCALE

The "key" and "scale" parameters allow you to define the musical scale on which you want to perform the correction. By combining these parameters, the 12 major scales and the 12 natural minor scales can be selected.

CUSTOMIZE SCALE

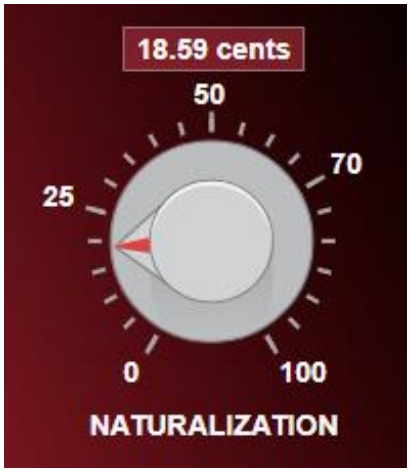
If you want to use a scale that is not between 12 major and 12 natural minors, you can customize the scale with the piano in the lower zone. To do this, you must activate the "customize scale" switch to the "ON" state, then you must mark on the piano which notes do NOT belong to your scale. The notes that are not included in the scale will change to a grayish color, while those that do belong will maintain their original color (white or black).

SPEED



The "speed" parameter controls how rapidly the pitch correction is applied to the incoming audio. It can take values between zero and one, with its maximum value will cause immediate changes from one pitch to another, and will completely suppress any vibrato or deviations in pitch. A setting between 0.2 and 0.6 is typical for more natural sounding pitch correction. Larger values allow through more vibrato and other interpretive pitch gestures, but slow down how rapidly corrections are made.

NATURALIZATION



The "naturalization" parameter allows the user to define the maximum that is allowed to detune. The unit used is cents, everything that is moving away from the target note more than the established cents will be corrected.

To maintain most vibratos, values between 10 and 20 cents are recommended.

How to apply the correction?

Once the correction has been configured using all the parameters described, all you have to do is press the "CORRECT" button. Then the message "TUNED AUDIO" will appear in the text box above the logo. Audio can be played using the play buttons below the logo.