

# The Tiny Sample Generator *Tutorial*

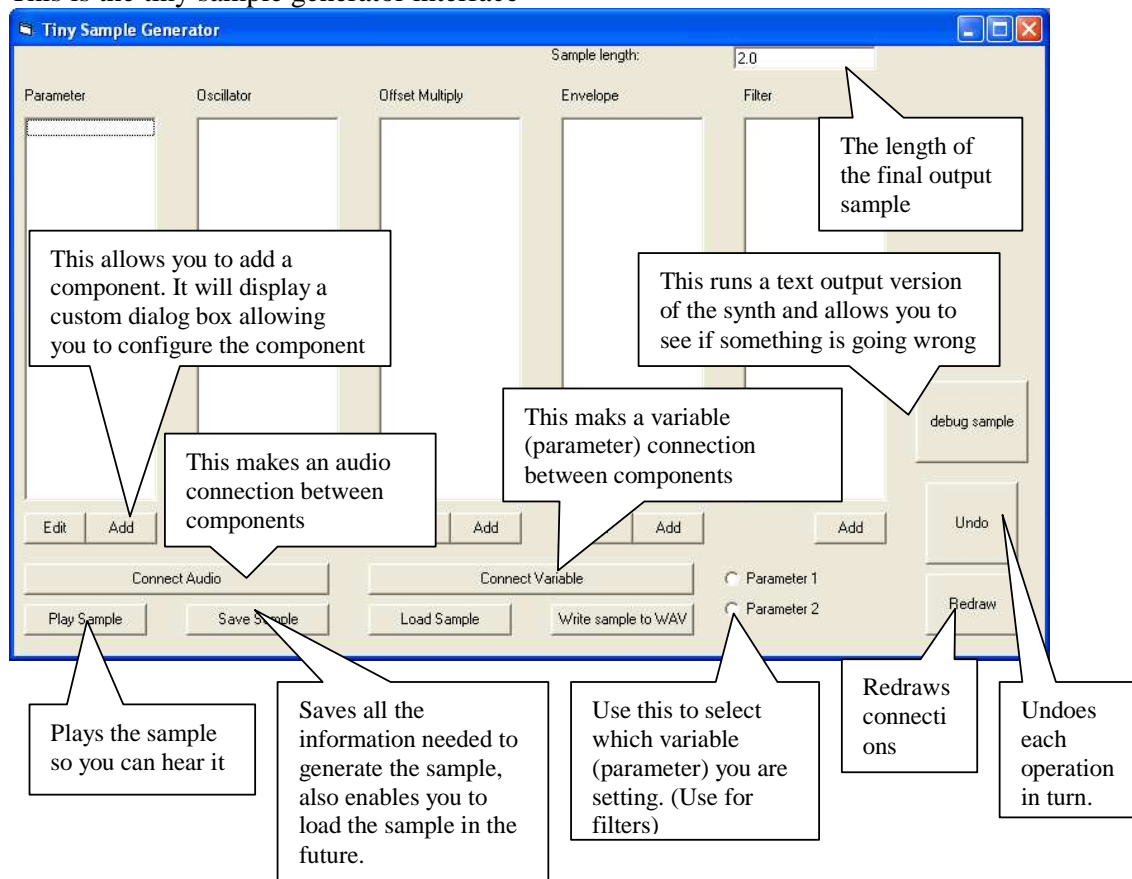
Adrian Boeing, 2004

## Introduction

The Tiny Sample Generator comes with a number of example files, it is generally recommended that you have a look at those.

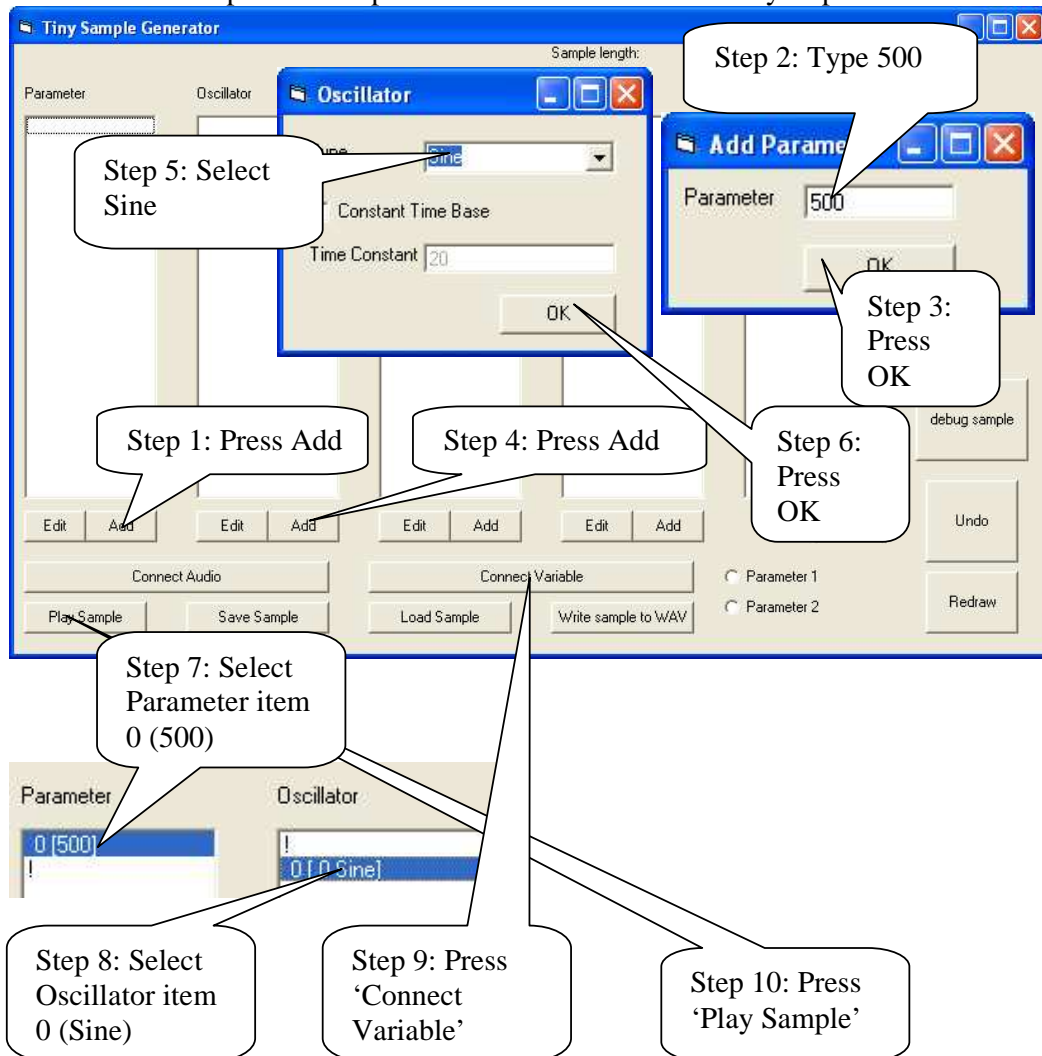
## Overview

This is the tiny sample generator interface

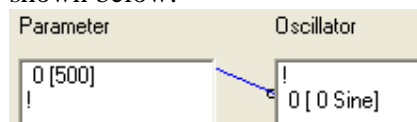


**Example 1. – Simple Sounds**

Lets build the simplest sound possible – an oscillator in 10 easy steps.



There you have it! If the audio did not play, make sure you have a connection as shown below:



It is important that the blue (ie: variable) connection (ie: line) is going in the right direction. That is, the little black circle is next to the oscillator, and not the parameter.

Finally, if the audio still does not play, try saving the sample in the same directory as the tiny sample generator executable.

**Example 2. - Hi Hat.**

Lets make a simple hi-hat brush.

Step 1: Add Parameter, value: 0

Step 2: Add Oscillator, select: Noise

Step 3: Connect Variable, Parameter item 0 (0) with Oscillator Item 0 (Noise)

Step 4: Add Filter, select High Pass

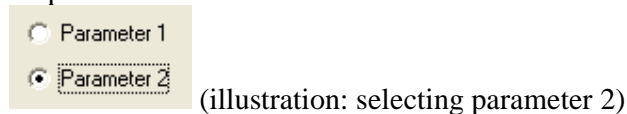
Step 5: Add Parameter, value: 7000

Step 6: Add Parameter, value: 1.1

Step 7: Select Parameter 1

Step 8: Connect variable, Parameter item 1 (7000) with Filter Item 0 (High Pass)

Step 9: Select Parameter 2



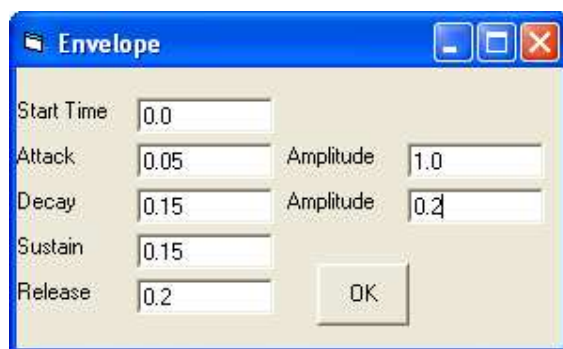
(illustration: selecting parameter 2)

Step 10: Connect variable, Parameter item 2 (1.1) with Filter Item 0 (High Pass)

Step 11: Select Parameter 1 (Note: *it is good to get into the habit of resetting the parameter back to 1 if you are not needing it*)

Step 12: Connect audio, Oscillator item 0 (Noise) with Filter Item 0 (High Pass)

Step 13: Add Envelope, values: Start time: 0, ADSR: 0.05,0.15,0.15,0.2, Amp: 1.0, 0.2 (See below)

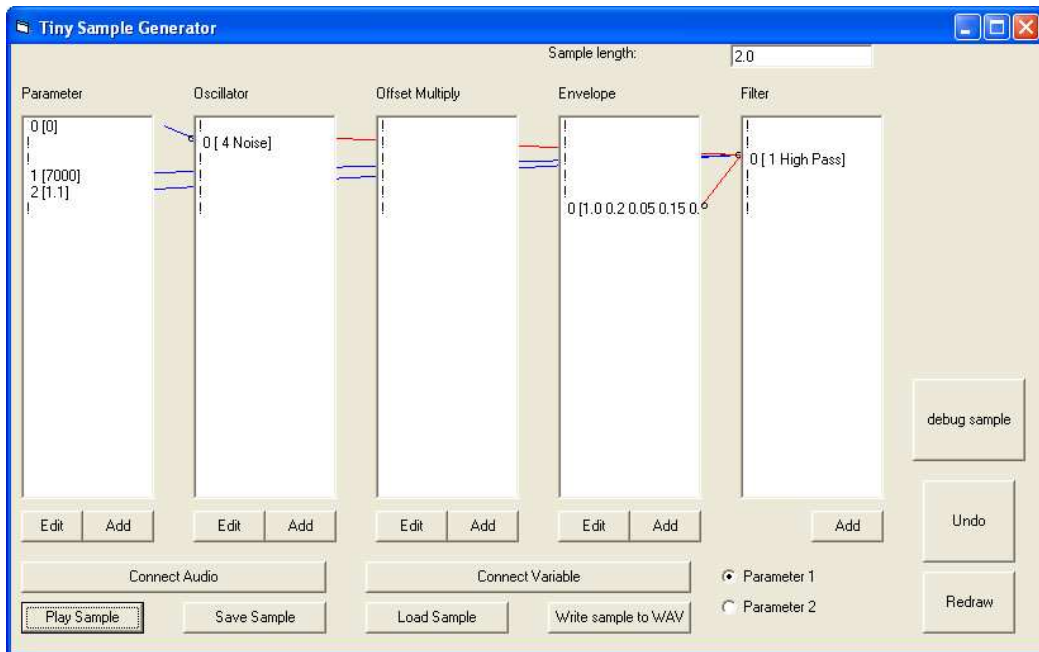


(illustration: setting up the envelope)

Step 14: Connect audio, Envelope item 0 with Filter Item 0 (High Pass)

Step 15: Press play sample.

A screenshot of the final configuration is below.



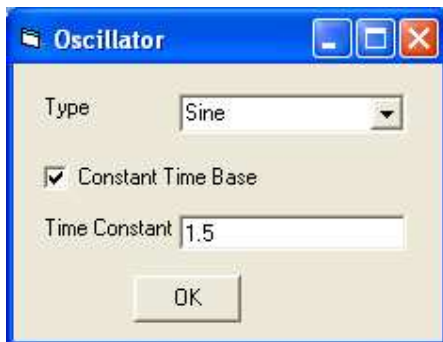
### Example 3. – Ray-gun

Step 1. Add Parameter, value 10

Step 2. Add Oscillator, select: sine

Step 3. Add Offset Multiply, value: 500, 200

Step 4: Add Oscillator, select sine, enable constant time base, time constant: 1.5



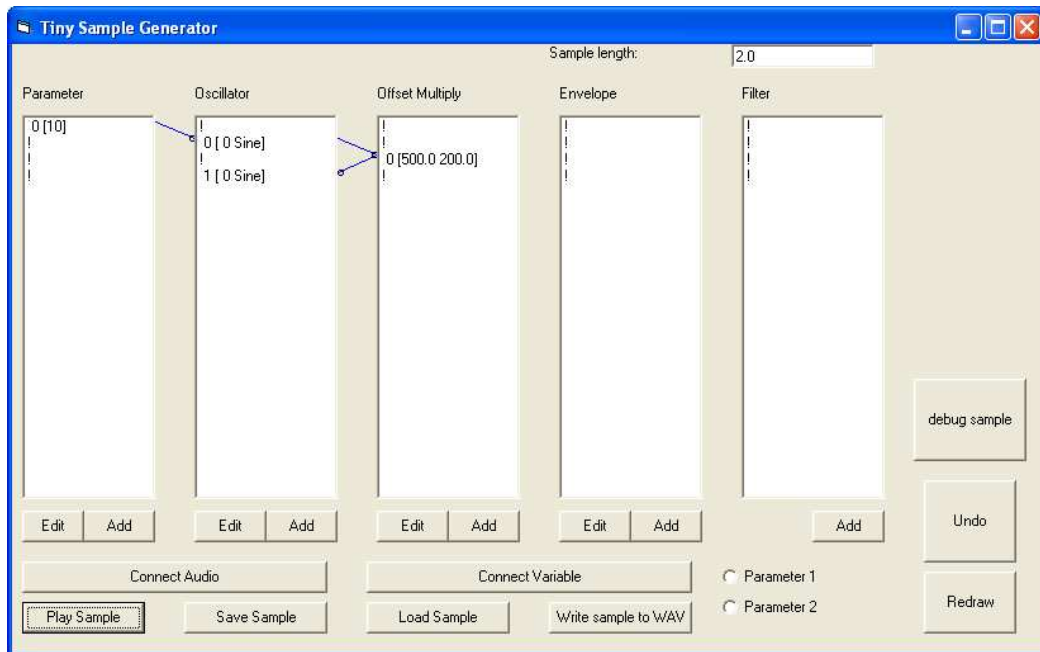
(step 4 illustrated)

Step 5: Connect Parameter item 1 (10) with Oscillator item 0 (Sine)

Step 6: Connect Oscillator item 0 (Sine) with Offset Multiply item 0 (500,200)

Step 7: Connect Offset Multiply item 0 (500,200) with Oscillator item 1 (Sine)

The screenshot below illustrates the final set up



Well, that's about it. Things get fairly confusing so its best to save often and to close and restart the program before you start on a new sound.

Remember the synth is almost completely modular, so you can plug any component into another. For example, you could extend example 3 so that the output from the last sine oscillator is the input to the frequency selection of the filter.

**Important things to remember:**

Audio has the range  $-1.0$  to  $+1.0$

Components follow a many-to-one relationship

Select the correct parameter from the radio list when using filters

Always have all the inputs into the filters set – otherwise the program may crash.

Experiment, and save often!