Big Tick
http://www.chez.com/rainbowvst

Cheeze Machine

1. Overview

The Cheeze Machine is a **free** string ensemble synthesizer. It is based on a CSound design by Sean Costello.
Like all our synths, Cheeze Machine can be used either as a standalone synthesizer (PC-only), or as a vst plugin (all platforms).

2. Installation

The downloaded package should consist in the following files:

Cheeze Machine.dll	The actual plugin file. You should copy this file into your vst plugins directory before being able to use it in your favourite vst host.
Cheezemachine.exe	The standalone version of the synth
Cheeze Machine.pdf	The document you are reading right now !

3. Interface description

Cheeze Machine generates sounds by processing a saw-like waveform through a chorus/ensemble section, a phaser section, and a stereo reverb.

The control parameters are:

(40) Attack	The length of the enveloppe attack segment
(41) Release	The length of the enveloppe release segment
(18) Brightness	The amount of high harmonics within the oscillators
(42) Ensemble speed	The speed of the low-frequency oscillators used to drive the chorus/ensemble effect
(43) Ensemble amount	The amount of chorus/ensemble effect (0 turns it off entirely)
(44) Ensemble feedback	Add some kind of "glimmery" reflections to the ensemble effect.
(45) Phaser speed	The speed of the low-frequency oscillator controlling the phaser effect.
(46) Phaser amount	The amount of phasing effect (0 turns it off entirely)
(47) Phaser feedback	Makes the phasing effect more obvious
(48) Reverb length	The length of the reverberated sound
(49) Reverb amount	The mix of reverberated signal

(7) Main out	The main output level
Voices	Controls the maximum number of sustaining notes the synth can play. The internal voice stealing algorithm will try to reuse any non-sustaining notes. If the same note than the one being played is already in use, it will be reused immediatly. Otherwise, the program will try to find a note to steal using the following rules: • never steal the lowest playing note • if there are notes currently being released, but not terminated, steal the one that has been playing since the longest time • if all notes are sustained, steal the one that was played with the lowest velocity.

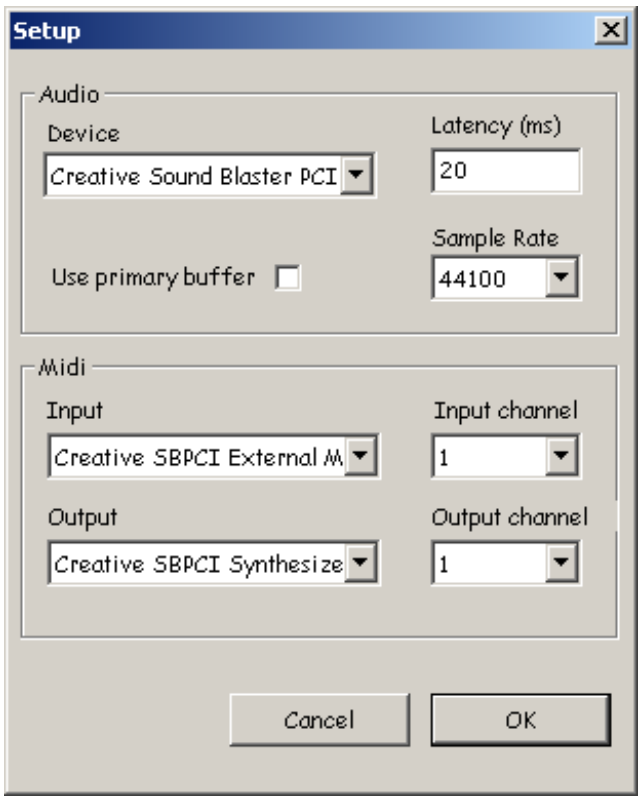
The number between brackets in the above list is the midi controller that can be used to control the parameter.

Every changes you do to a patch are stored into a temporary patch. This temporary patch is commited into one of the 8 patches slots whenever:

- You save the current bank. The temporary edits are then stored to the currently selected patch slot.
- You use alt-click on one of the 8 patches buttons. The temporary edits are then stored to the clicked patch slot. You can use this feature to quickly copy a patch in any of the 8 slots.

4. Standalone operation (PC only)

Running the Cheezemachine.exe file will launch the standalone version of the synth. In this mode the program does not require a VST host, but is directly controlled by a MIDI input device. You can configure the standalone mode settings by clicking on the setup button, in the top right bar. This should bring up the following window:



The audio section, to the top, configures settings for the audio (DirectSound) interface:

Device	The audio device to use.
Latency	The desired playing latency (for 44100 sample rate). Experiment with this value, too high a value will cause a noticeable delay when playing your MIDI keyboard. Too low a value will cause audible noise and crackle.
Use primary buffer	When set, the system will use exclusive access to the audio device. This will allow for better latency settings, but will prevent other applications from playing sound while the synth is in use.
Sample rate	The desired sample rate. The higher this value, the lower the actual latency, but the higher the CPU usage.

The midi section below defines settings for the MIDI interface:

Input	The midi input device to use.
Input Channel	The desired MIDI input channel.
Output	The midi output device to use (currently not used by Cheeze Machine)
Output Channel	The desired MIDI output channe (currently not used by Cheeze Machine)

All these settings are stored within the registry, under the following key:
HKEY_CURRENT_USER/Software/BigTick/CheezeMachine
If you wish to uninstall the program (and have used the standalone version) you should remove this key manually.

5. Credits

Credits go to:

- Sean Costello for his CSound design that started it all
- Sean "Deadskinboy" for the fantastic woody user interface
- Jon Seneger for the alternate, wonderfully slick "metal" interface
- Warren "Dub Jay" for compiling the Mac versions.
- Kevin Hammer for making some of the presets.

and to everyone who helped beta-testing this thing. Thanks to all.