

The Tuareg

interactive virtual phrase sampler

© by **Bram Bos** 2000
bram@mindless.com

The Disclaimer, literature in its purest beauty...

THIS SOFTWARE ("THE TUAREG") AND ACCOMPANYING WRITTEN MATERIALS INCLUDING INSTRUCTIONS FOR USE) ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. FURTHER, BRAM BOS, (I) DO NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE, OR THE RESULTS OF USE, OF THE SOFTWARE OR WRITTEN MATERIALS IN TERMS OF CORRECTNESS, ACCURACY, RELIABILITY, CURRENTNESS, OR OTHERWISE. THE ENTIRE RISK AS TO THE RESULTS AND PERFORMANCE OF THE SOFTWARE IS ASSUMED BY YOU. IF THE SOFTWARE OR WRITTEN MATERIALS ARE DEFECTIVE YOU, AND NOT I OR MY DISTRIBUTORS, AGENTS, OR EMPLOYEES, ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION.

THE ABOVE IS THE ONLY WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, THAT IS MADE BY ME, ON THIS PRODUCT. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY ME, MY DEALERS, DISTRIBUTORS, AGENTS OR EMPLOYEES SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY AND YOU MAY NOT RELY ON ANY SUCH INFORMATION OR ADVICE. YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE, OR COUNTRY TO COUNTRY.

NEITHER I NOR ANYONE ELSE WHO HAS BEEN INVOLVED IN THE CREATION, PRODUCTION OR DELIVERY OF THIS PRODUCT SHALL BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, AND THE LIKE) ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT EVEN IF I HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Having said all this now let's move on to the actual information you were looking for...

Index:

0. Shareware/Freeware notes
1. Introduction
2. Tuareg's different "sample types"
3. General features
4. Version history

0. Shareware/Freeware notes

There are currently two versions of Tuareg:

0.1 FREE

The FREE release of Tu is freeware. You are allowed to copy it and use it just as much and as long as you like. If you make a copy of the software, all the original files (including the text) must be included. It is strictly prohibited to make any changes to any file, except for any demo files...

0.2 FAT

The FAT release of Tu is the bigger and more capable brother of the free version. You must register at "**Share It!**": <http://www.shareit.com> in order to get a serial number to use this version. Needless to say you are not allowed to spread that serial number, isn't it?

1. Introduction

The Tuareg is a pattern-based groove composer / remixer that allows anyone to make loop- and sample-based music with ease. The general idea behind it is to load up a couple of loops, sounds, and other ingredients for your mix and blend them together into a song using The Tuareg's sequencer. Because all effects and tools that are at your disposal are realtime and non-destructive, you can experiment as much as you like, to sculpt your patterns as they fit your needs.

2. Tuareg's different "sample types"

In the Tuareg, there are a number of different sample/loop types at your disposal to make life easier for you. You can specify for each sample you load into your song what kind of type they are and ofcourse you can always change these settings from the "sample-manager". Let's have a look at the differences:

- **Loops (drumloops, melodic loops, ...)**. A loop is a sample that automatically fits itself into one measure (or bar) of your composition. And there it loops, hence the name. So if you're in pattern mode, and you insert a loop-sample, it will adjust its speed (and pitch) to the current tempo. When you import a wav-file from disk, Tuareg automatically makes it a Loop. If you need it to be another type of sample, you can change the attributes in the sample-manager.
- **Streams**. Streams are samples that play back without minding the current tempo or measure. They

are streamed from beginning to end (or until another sound is triggered in the same channel) and can be pitched individually or (with aid of the pitch-tool) fit into a specified number or measures/patterns. This way you can, for example, render a song in your favorite softsynth and use it as a layer in your tuareg song. Or you could use it to insert a vocal sample that plays over two or more measures.

- **Patches.** Tuareg has two individual instruments built inside itself: the RaGE and the BLiSS. The first is a drumcomputer with a matrix-editor. The latter is a simple melodic/bassline sequencer. With these instruments you use "patch"-samples. This can be short drumsounds, synthesizer blips, bassdrums, special effects, just about any short sample you could use as an instrument. Because you normally won't use these instruments directly in your song (it is possible, but not usual) this special label makes it easier to organise them. Technically speaking, they behave the same way as streams, but you can hide them from your normal sequencer view and in the RaGE and BLiSS units you will only be shown these patches.
- **RaGE Patterns.** These are the loops made with the RaGE drumcomputer. When using RaGE patterns in your songs they behave just like normal WAV samples, but the cool thing about them is that when you hit the "Edit" button you can still edit them. Basicly a RaGE pattern is an editable WAV-file, you can apply all effects and filters to them, but when you find out that one little hihat-lick is missing, you can still add that later on... cool huh ?
- **BLiSS Patterns.** BLiSS patterns work the same way as RaGE patterns, except that they were created and can be modified with the BLiSS unit.

3. General features

3.1 Variator

The Variator slices your loop (it works only on **loops**, **BLiSS patterns** and **RaGE patterns**, not on streams!) into 16 parts and lets you reorder these to make variations on beats and melodic loops, so you don't have to make a totally new drumpattern for just a small adjustment or fill type thing. Also, you could use it to chop and blend your normal hiphop beats and turn them into mind-boggling complex jungle patterns with ease.

3.2 Distort

Distortion is used to rip your speakers apart, and to make the sound go wild. It pulls your audio signal through an if-you-saw-it-I-would-have-to-kill-you special time-variant non-linear fuzz algorithm. The coolest thing about it though, is that you can draw the distortion curve on a canvas so you can let the dirt evolve into your mix...

3.3 Pan (FAT version only)

The Pan feature lets you move your channels through the stereo-field, changing over time. Just draw the panorama curves on the screen and listen closely to what happens.

3.4 Filter (FAT version only)

The filter is used to make your sound come alive. Technically speaking it "filters" out overtones and emphasizes frequencies around the cutoff-point (resonance). But when you hear it you'll just say: cool! It is a special filter type, because it's 12dB/Octave whereas most synthesizer filters are either 18dB or 24dB. The difference is that synth-filters are used to create sounds and radically change them. Tuareg's 12dB (2-pole) filter is used to add life and character to existing sounds, so it becomes an effect rather than a synthesis element. Use the "Cutoff" curve to muffle the sound and draw "resonance" waves to get those typical hollow sweeps...

3.5 Copy FWD

Lets assume you just made the most awesome filtersweeps or distortion curves. You obviously don't want to draw those in every measure of your song again. So you can use "Copy FWD" to copy certain settings of the currently open channel to subsequent measures. You can specify which settings should be copied and which should be left untouched...

3.6 Pitch

Pitch brings up a box in which you can make pitch/duration settings, for **streams** and **patches**. You can use the big slider to make small or large adjustments in the pitch settings manually, or you can use the boxes below it to use a predefined setting. You can choose for either a melodic pitch scale (the default sample will be considered to be a middle C note) or a duration preset. The latter could come in handy when you have a screaming 4-measure acid sample that you would like to fit exactly into 4 measures. Please note that choosing a pitch or duration preset only modifies the pitch according to the current tempo. When you change the tempo afterwards, pitch settings will remain unchanged and have to be adjusted again.

3.7 Shift & Gate

Use these to determine where in the measure a sound should be triggered and (if desired) where it should be cut off.

3.8 Channel pair MIX-MODES (loads o' leds)

These buttons let you specify how two subsequent channels are mixed with eachother. The default is normal, where both channels are sent directly into the mixer unit. You can, however, let two channels influence eachother, by letting them crossfade into eachother. Just try the different settings and hear the results. With this tool you can make totally original new loop out of two really overused old ones. The **FAT** version also offers a custom option so you can adjust mixing behavior to your own needs.

3.9 Gatemask

The gatemarks lets you control rhythmic mixer-mutes. You can let the sound stutter or sound choppy by letting the

mixer open and close in rhythmical patterns.

3.10 Delay Send

Determines the amount of delay/echo effect that is sent from the two currently mixed channels. Detailed delay settings like the feedback amount and delay-time can be made on the main front panel.

3.11 Loop pattern/play sequence

This switches between play modes. In "**loop pattern**" mode the currently selected pattern is looped indefinitely. In "**play sequence**" mode all measures are played one after each other as a sequence.

3.12 Bounce pattern (FAT version only)

This renders the current pattern, and saves it in your sample-list as a WAV loop. This way you can bounce all the current settings into a single channel (or two if you use stereo). Ofcourse a bounced pattern loop is no longer editable as a pattern. It has become a normal loop.

3.13 Audio Smoothing Engine (system feature, FAT version only)

With this option enabled, your sound will be much smoother then in the usual sound mixing kernel. This improvement of audio quality is made possible by a highly advanced interpolation algorithm and a clever antialiasing filter that is applied to the audiostream. Audio smoothing is used in the core engine, in the BLiSS renderer and in the RaGE unit.

4. Version history

March 6, 2000: Free Release 1.0

March 10, 2000: Free Release 1.1

- Fixed loads of annoying bugs
- Added tooltips
- Optimized fileformat
- Improved Variator functionality
- Some minor optimizations in the RaGE and BLiSS units

March 25, 2000: Free Release 1.2

- Bugfixes
- WAV export in Rage and Bliss units
- Sequence memory manager implemented
- Tu FREE is now compatible with the FAT version
- Added progressbar when rendering songs
- Removed "clicks" from GateMask unit

March 25, 2000: FAT Release 1.0

**This is just a preliminary version of the documentation.
New versions of this text and a lot of other cool stuff can
be found on the Tuareg homepage on the internet:**

<http://www.brambos.com>

Bram Bos

March 15th, 2000

FREE version 1.2

FAT version 1.0