

## 6. REVISION 1.2 (September 2010)

This version brings the following new features and improvements :

### 6.1 FOUR NEW EFFECTS

You can access 4 new effects in the effects section (BRAIN switch lit up blue).

First select « **WAVE** » mode (the « **5 WAVE** » switch turns red)

Then select the « **4/ F3** » switch which turns red.

Now select one of the 4 effects with « **2 / F1** » and « **3 / F2** »

#### 1/ **Vibrato (the switch 1 turns up white):**

This is a short delay that is modulated by a sinusoidal LFO. The delay time is offset between left and right to create a stereo effect. The « **CLOCK** » pot sets the vibrato rate. If you mix the vibrato with your direct signal (« **NAKED** »), you'll get a chorus effect.

#### 2/ **AR Envelope Filter (the switch 2 lights up white):**

This is a special Envelope Filter which works in the same way as the waveshapers 6, 7 and 8 but without the oscillator.

The « **DRIVE** » potentiometer sets a threshold.

The « **CLOCK** » potentiometer sets the Attack or Release time depending on it's position :

First half : Attack is very fast, Release time is very short at the beginning and increases in the first half of the **CLOCK** potentiometer.

Second half : Release is slow, Attack time is very short at the beginning and increases in the second half of the **CLOCK** potentiometer.

The « **FREQ** » potentiometer sets the envelope intensity depending on it's position:

First half : Filter frequency is at its minimum setting and envelope intensity increases in the first half of the **FREQ** potentiometer.

Second half : Envelope intensity is at its maximum setting and filter frequency increases in the second half of the **FREQ** potentiometer.

If you set the « **DRIVE** » pot low, you will notice fast triggering of the Envelope Filter attack. This is a quite funny effect.

#### 3/ **Low Alternate rectifying (the switch 3 lights up white):**

This effect is similar to the waveshaper 2 except that only one of 4 alternations is used.

This is effectively a 2 octave down distortion.

#### 4/ « **Tube** » **Clipper (the switch 4 lights up white):**

This is a smooth saturation, pretty similar to a tube saturation. ( but in 8-bits ! ) This provides very good results with drums and bass sounds.

## 6.2 CONSTANT OUTPUT LEVEL

Previously some bit combinations could generate important level differences. It prevented from using the bit 1 alone for instance, because of a very low output. Output level is now constant regardless of the bit combination used.

### **NB :**

Constant Output Level feature was included on previous firmware revision. So you may have this feature already installed in you Biscuit and won't notice any difference.

## 6.3 STEP FILTER

1/ Steps 5 and 7 were added to the « **NUMBER** » function.

2/ When the STEP FILTER is in Play mode, you can move the « **FREQ** » potentiometer and your modification will be taken into account, only on the currently selected step.

3/ The position of potentiometer « **Q** » as well as the « **FILTER** » mode are now also taken into account in the STEP FILTER sequencer.

When you load an old preset (created under the previous version), the Q and FILTER settings are memorised into the 8 steps to keep compatibility.

### **NB :**

Should you prefer the old STEP FILTER version (with only the FREQ taken into account), you can deactivate this new version:

- 1- BRAIN is light up, check that STEP is on (switch 8 light up red),
- 2- Press BRAIN which goes OFF,
- 3- Press BRAIN again and keep it pressed,
- 4- Press switch 8 (STEP) while keeping BRAIN pressed.

You can go back to the new STEP FILTER version by following the same procedure. The version is kept into BISCUIT memory.