In this series of patches we will be covering classic Drummachine sound-synthesis using the extensive timbral palette of The**Bateleur** 42hp System for a unique approach and fresh results. First off: The Bass Drum. We begin with a sub square into the VCF, modulated (TZFM) using the VCO's waveforms for a crunchy and harmonically rich saturation. The Envelope Generator's unique Mixed Curvature modes will provide the punch and oomph.

Suggested settings: short attack, pronounced decay, release to taste.

The fine-tune control will be an additional, helpful setting to vary the timbre of the MODULATOR.

VCO range switch in the 2nd position, ideally your CARRIER is in a higher register than the MODULATOR.

Red LED = Mixed Characteristic 2 for an exaggerated attack-phase "thump". Toggle through the Envelope Generator's Curvature characteristics by pressing mode + time toggles simultaneously.

Suggested patching:
The VCO will be an octave above our CARRIER (sub), when patched to the TZFM modulation input, even the lowest gain will affect the TZFM circuit, subtlety is key. Listen and fine-tune.

Optionally we can add (stackable cables or summing circuits) the velocity information we're extracting from our incoming MIDI data on top of the Envelope CV for a more humanized feel.

Set the VCF mode switch to the UP position for lassic LPF.

TZFM modulation input, highly sensitive, threshhold detection active immediately upon flicking the switch**.

Set cutoff frequency to a low setting to get some of that 24dB rolloff "thickness" on the sub waveform.

The modulation depth control will set the sensitivity of the Through-Zero circuit input gain, by default the TZFM mode has a minimum threshold already active even at the "off" setting (all the way anti-clockwise), use judiciously.

A bit of noise mixed in to the MODULATION signal will have a very interesting, destabilizing effect on the TZFM circuit.

Mix to TZFM modulation input. The combined signal is our 2nd MODULATOR signal.

*Green LED = Through-Zero FM mode.

**Consult VCO technical specifications on modulation modes and switch positions as well as input ranges.

As usual, the VCA modulation input is normalized to the cutoff modulation input on the Expander module. For this patch, we want to avoid the Envelope CV affecting our VCF's cutoff frequency, we can either set the cutoff control to 0 or use a dummy cable to break normalization.

Set the modulation mode switch to the DOWN position for TZFM mode. The modulation status LED* will give us an indication on the type of modulation we're applying.

By default the sub output is normalized to the filter input. The sub waveform will be our CARRIER signal for this patch.