



“Sideways, orange sunset
Light transverses the woods with sparkles and textural shadows;
A baby un-mosses an ancient, golden toy.”
-Wang Wei

Teaskul F. Mobenthey --- *Mister Grassi* Manual --- Page 1

Grassi, a touch-module, contains twelve square waves, used as the clock and data for shift registers, each followed by primitive resistor DAC. The DACs modulate clock and counter-clock wise, yielding closed loops of perpetual modulation, triggered by touch. Each of the six outputs are a single, four-bit DAC. Listening to them raw, they generate modem sounds to pure noise on touch. On release of touch, each DAC holds the contingent position of its DATA. Thus the DATA can be used as CV for up to six other operators, scrambled on touch. Touch->Scramble->Listen; Untouch->Hold->Feed.

Grassi, an ultra-raftable module, features all circuitry and the front panel on one circuit board. The final module thickness is only as deep as the 3.5mm jacks- not more than about a centimeter, so it can fit in a thin wooden case.

Grassi is a 12HP Eurorack module that runs on +12 and -12 volts. Actually it completely shuns the negative twelve volts, and thus it can run from a unipolar, plus twelve supply. This helps make it raftable, as it only requires a branch power line from the increasingly common 12V trunk. Thus, when ordered with a wooden case, it has a 2.1mm, tip positive, 12 V jack to power it. For mounting in a traditional Eurorack case, it comes with a power connector traditional to that format.

Grassi features a triangular hexagon, used for square-wave outputs (outer rim) and DAC triggers (inner core). Thus, a triggering touch should connect an outer station to an inner station, to begin the *runbling* process.

Runbling, a coin of Rob Hordijk, is exactly what *Mister Grassi* does. He takes two oscillators and mixes them in the shift register chip, treating one as data and the other as clock. The result, a memory heterodyne, feeds back into the oscillators. This circular process traverses both analog and digital, soft tones and square drones.

Interrogajoke Manifesto

In order to propel the new ultra-raftable line of Mobenthey modules, a focus has been identified: that of the touch controller. An insider of the synthesizer clearing house has made this clear. The *interrogajoke* concept was formed to interrogate and also play about the touch interface. Is it a piano? How does it feel the finger? How does the finger feel it?

The most compelling question is the middle one; most touch devices use a high frequency signal that courses through the fingers and senses their capacitance. Although this is a signal, the module neglects it as unseemly ultrasound and denies it sonic presence. That is the core of the *interrogajoke*- how to give sonic presence to capacitive sensing waves.

The toucher is a body without organs- it is not filled with knobs and switches that demand legends, but rather the cryptic runes inspired by sensor fields. As such, it is a place for bumbling fingers, not the precise en-goaled tweaker.

Grassiforms

- *Grassi* is a module for your Eurorack case, with trad Eurorack power cord.
- In *Maverogue* form, it has speakers, *Sukang Style* acoustic case, and runs on nine volt battery.
- The IGM keyboard (*Interrogajoke: Grassi Mocante*) is a completely alternative keyboard- a pitchwheel (*Grassi*) and a rack of keys (*Mocante*).

