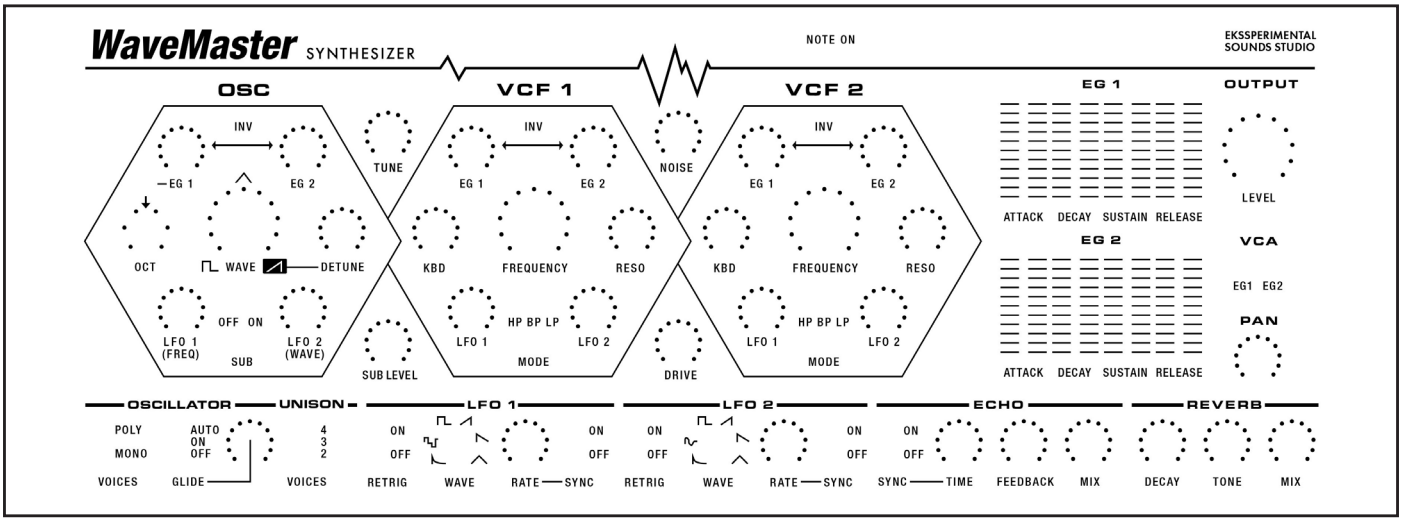
WaveMaster

SYNTHESIZER

1.1.0 USER GUIDE

EKSSPERIMENTAL SOUNDS STUDIO

Front Panel



OSC
Oscillator

The **WAVE** knob will morph the waveform seamlessly from Square to Sawtooth via Triangle.
EG2 and **LFO2** will modulate the waveshape according to the settings of each modulation source.
LFO1 will modulate pitch and **EG1** can be set to either modulate the waveshape (default) or the pitch by activating the button connecting to **OCT** knob.
The **OCT** knob will set the base pitch of the oscillator. For fine tuning use the **TUNE** knob.
The modulation from one of the envelope generators will always be inverted, use the **INV** switch to select which one.
DETUNE will add and spread saw waveforms. The total amount of saw waveforms can be set using the **UNISON** switch below. The detuned saw waves are faded in as the **WAVE** knob approaches the saw position (or when modulation pushes the waveform towards the saw shape).
The **SUB** switch will activate a square wave one octave lower than the main oscillator.
The **OSCILLATOR** can be set to **POLY** (16 voices) or **MONO** (1 voice). With glide actived the pitch will slide depending on the distance between notes.

VCF1&2
Voltage Controlled Filters

Both filters can be set to either **HP** (12dB/oct high Pass), **BP** (6dB/oct band pass) or **LP** (18dB/oct low pass) with the **MODE** switch. Add modulation from **EG1**, **EG2**, **LFO1** and **LFO2** to the cut off **FREQUENCY** with the corresponding knobs. Use the **RESO** knob to add emphasis (resonance) the the cut off frequency.
The **KBD** knob will modulate the cut off frequency according to which note is played.
The modulation from one of the envelope generators will always be inverted, use the **INV** switch to select which one.

EFFECTS
Echo & Reverb

The **ECHO TIME** can be set to **SYNC** to the song tempo using the switch. **FEEDBACK** will control how many repetitions are made and **MIX** will set the balance between echo and dry signal.
Reverb **DECAY** controls the length of the reverberation. For imitating large spaces use longer decay time. The **TONE** control will dull or brighten the reverb signal.
The **MIX** knob will set the balance of reverb and the dry signal.

EGs & LFOs
Envelope Generators & Low Frequency Oscillators

EGs and **LFO**s are used to modulate the waveform, the pitch and the filter cut off frequency.
The LFOs can be set to **RETRIG** with each note and **SYNC** to the song tempo with the two corresponding switches.
LFO1 has a sharp random wave shape whilst **LFO2** has a softer drifting random wave shape.

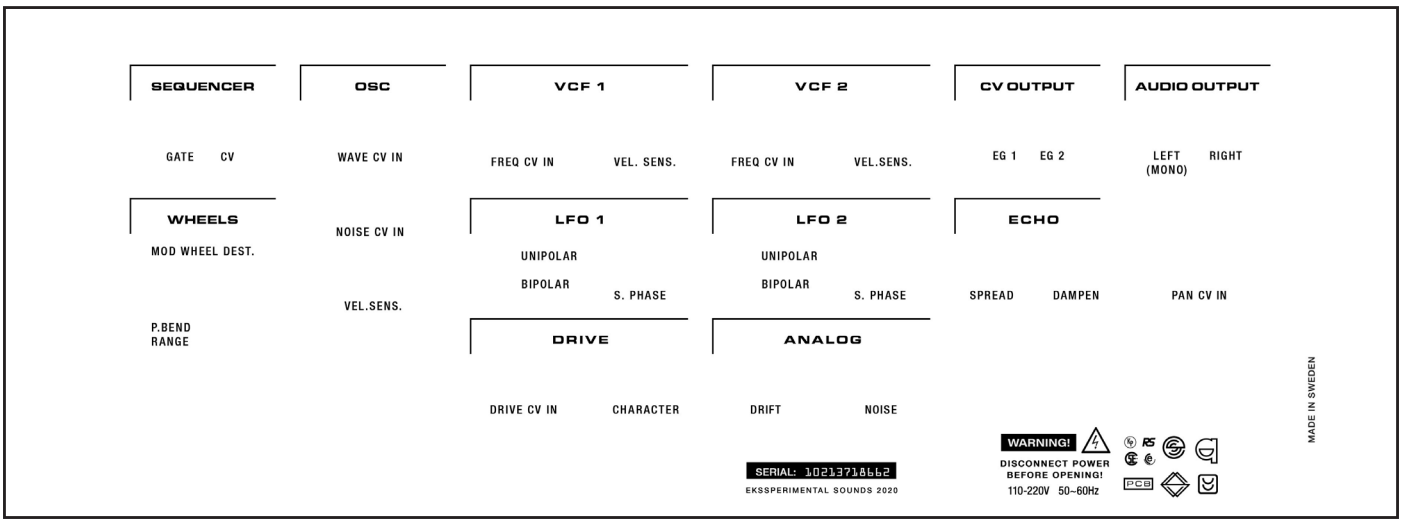
NOISE & DRIVE

Add white **NOISE** to the oscillator signal before going into the filters.
DRIVE the signal both before VCF2 (diode shaper) and after VCF2 (tanh shaper).

OUTPUT
Level & Pan

Set the overall volume with the **LEVEL** knob. Under **VCA** select what envelope generator to use for the output level.
PAN will shift the signal from left to right.

Back Panel



CV
Control Voltage jacks

Use control voltage to modulate the labeled parameters. Use the small trim knobs next to the jack for adjusting the level of modulation.
Each **EG CV** out has a slightly smoothen signal out.

Wheels
Modulation & Pitch wheel behaviour

Set the destination for Mod wheel and the range of the pitch bend wheel with these buttons.
If set to **LFO Depth** the mod wheel will scale the amount set by knobs on the front panel.

Trimmers
Velocity Sensitivity, Polarity, Analog, Character, Echo

Use these trimmers to dial in the preferred levels and behaviour of corresponding functions.

Thank you for supporting Ekssperimental Sounds Studio!

Ekssperimental Sounds Studio is a one man project driven by the passion for experimental electronic sounds, new and old synthesizers and music gear. As a Reason user since 2001 it truly is a dream come true to finally be able to create my own synthesizers and effects for the Reason rack.
Thanks to all of you who buy my products I can continue to learn and develope more fun and inspiring devices for our beloved rack.

I hope you will enjoy WaveMaster!

Cheers,
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