

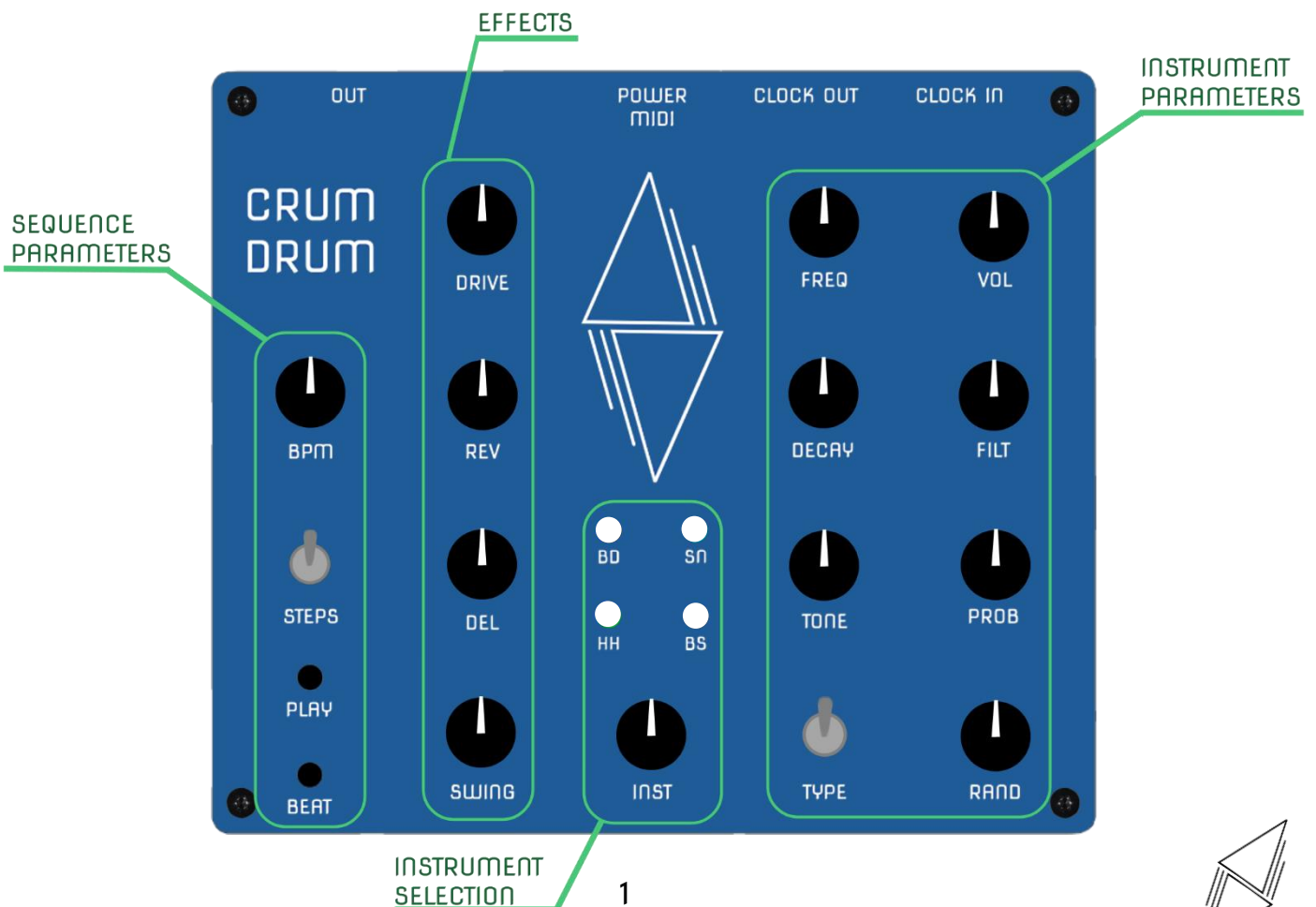


CRUMDRUM



FEATURES

- 4 instruments: Kick, Snare, Hihat, Bass
 - 8 sound parameters per instrument
 - Overdrive, Reverb, Delay & Swing
 - Send & Recieve Analog & Midi clock
 - Send & Recieve Midi sequencing
 - Recieve CV to control sound parameters
 - Randomized and probability based sequencing
- And more!





Sequence parameters

BPM

This sets the tempo of the sequence.

While clocked externally via USB Midi, this knob sets the clock division to 1/4, 1/8, 1/16 or 1/32 notes.

While clocked externally via analog Clock in, this knob sets the clock division to 1/4, 1/4 triplets, 1/8, or 1/16 notes.

STEPS

This sets the sequence length to 16 (down), 32 (middle) or 28 (up) steps.

PLAY

Starts/stops the sequence.

BEAT

When pressed down, this generates a new sequence for the current step of the selected instrument. To generate a entirely new sequence, select all instruments & press down the button for the duration of the entire sequence length.

Effects

DRIVE

Controls the amount of overdrive/distortion of the CrumDrum.

REV

Controls the reverb size and reverb mix.

DEL

Controls the delay mix and feedback. The delay-time is tempo synced and the subdivided differently dependent on the tempo.

SWING

Sets the amount of swing.





Instrument selection

BD - Bassdrum/kick indicator

SN - Snare indicator

HH - Hihat/cymbal indicator

BS - Bass/melody indicator

INST

This selects which instrument the *instrument parameters* will control. The selected instrument is indicated by the four LEDs.

All instrument parameters can be set individually for each instrument by selecting the instrument you want to control.

When the INST knob is turned all the way to the left, all leds will light up and you control all four instruments simultaneously.

Instrument parameters

FREQ

Sets the main frequency of the selected instrument.

For the **Bass/melody** instrument, the freq sets the *lowest* frequency (fixed to a chromatic scale).

DECAY

Sets the decay time of the selected instrument. The maximum decay is different for the different instruments.

TONE

Bassdrum - TONE sets the amount of pitch envelope.

Snare - TONE sets the mix between a tonal voice & a noise voice.

Hihat - TONE sets the mix between a tonal voice & a noise voice.

Bass/melody - TONE is controls the FM-amount. The tone knob is divided into three sections. Each section has a different FM-voice with its own characteristics.





TYPE

This switches between three versions/types of each instrument. That means that there are three different kick-, snare- and hihat/cymbal types.

For the **Bass**, TYPE switches between three different scales.

1. Octaves (up)
2. Minor pentatonic (middle)
3. Major scale (down)

The RAND potentiometer controls the **Bass** melody. The higher the value of the RAND potentiometer, the more high notes are introduced. If the RAND is set to zero the **Bass** plays the same note every time.

VOL

Sets the volume of the selected instrument. Set the VOL to zero to mute an instrument.

When all instruments are selected, the VOL controls the master volume of the CrumDrum.

FILT

Lowpass/Hi-pass filter. The filter is bypassed when set to 12 o'clock. Turn to the left = lowpass, turn to the right = hi-pass.

PROB

Sets the probability of the instrument being played. When set all the way to the right, the instrument will play 100% of the time. set to 9 o'clock it will play roughly 15% of the time, 12 o'clock is 50% etc.

RAND

This creates variation/randomness in the instruments sound. The more randomness, the more each instrument parameter is randomized for each step. This is very useful to create an organic and varied sequence.





Inputs & Outputs

OUT

3.5mm Stereo audio output.

POWER/MIDI

5v micro-USB to power the unit.

The CrumDrum can send & receive Midi clock at the standard of 24ppqn via USB in a DAW such as Ableton. While clocked via USB Midi, the BPM knob sets the clock division to 1/4, 1/8, 1/16 or 1/32.

The CrumDrum can be sequenced on midi-channel 1 via midi in a DAW accordingly:

C3 - Kick
C#3 - Snare
D3 - Hihat
D#3 - Bass

It can also be used as a Midi-Sequencer. When the instruments are played it sends midi note messages on midi-channel 1:

Kick - C3
Snare - C#3
Hihat - D3
Bass - D#3

The CrumDrum must be paused to be clocked or sequenced via USB.

CLOCK OUT

5V clock pulse output, one Trigger per step.

CLOCK IN

3-12V clock input. While clocked via CLOCK IN, the BPM knob sets the clock division to 1/4, 1/4 triplets, 1/8 or 1/16 notes.

CLOCK IN can be configured to act as a **CV-input**. Press and hold **BEAT** and press **PLAY** to toggle CV-mode. The LEDs will flash to indicate the current CV mode. The selected instrument will be affected by the incoming CV signal.

Example: To control the Snare frequency with CV, first select the Snare using the **INST** knob. Then toggle CV mode until the Freq-CV mode is indicated by the LEDs (2 blinks).

CV MODES

Mode 1 (1 blink) - *Clock IN*
Mode 2 (2 blinks) - *Freq-CV*
Mode 3 (3 blinks) - *Decay-CV*
Mode 4 (4 blinks) - *Tone-CV*

