

Falcon Singles - HANG

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Installation

As there is no default location for 3rd party sound libraries for Falcon, you can just install the folder "HANG" which you extracted from the RAR-archive anywhere on your system, preferably on a fast external drive, if you have one available. Then you just locate the folder "HANG" in the Falcon browser under "Devices", add it to your favorite places and load a program from one of the categories in the main "Programs" folder, or a sample from the sample subfolders, or a wavetable from the wavetable folder or an image into the wavetable synth from the Images-folder. You can also drag and drop programs directly from the Finder into "Parts" in Falcon.

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1.) The licensee must not distribute the patches, samples, wavetables and images from **Falcon Singles - HANG**, resample and re-synthesize them, copy or otherwise replicate the patches, samples, wavetables and images from this sound library in any commercial, free or otherwise

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2.) The license to the sound library **Falcon Singles - HANG** may not be given away or sold, it is not for resale (NFR).

Description:

Multi-sampled HANG percussion, deeply sampled with plenty of articulations, textures and electronic derivatives. The nine pitches of the Hang were sampled at 5 velocity layers and 6x round robin, two articulations were sampled (mallet/hand), also the backside of the Hang was captured, producing some remarkable sub-bass tones. Dynamic tremolos for each pitch (hand/fingers/mallet) were also recorded, dozens of little rubber balls were inserted into the instrument creating sublime pentatonic textures, wavetables were extracted from Hang samples, textural Hang sounds were re-synthesized and processed with a plethora of sonic tools to compose a unique collection of mellow, beautiful, mysterious, haunting and new-age sounds. The original tuning of the Hang was preserved in many patches, in quite a few presets there is a Macro installed which will tune the samples to the traditional tempered tuning.

Up to 25+ Macros and switches are assigned in each patch, most presets make use of the modulation wheel, many patches also use aftertouch and modulation via velocity, providing detailed control over volume envelopes, filtering, amplitude- and pitch modulations, dynamics, EQ, stereo animation and more.

All patches use some sort of background image in the UI, split patches have colored key-zones in the Falcon keyboard for easier navigation.

All Hang samples were produced at a resolution of wav 48Khz/24 Bit/stereo - recorded in L-C-R with 3 Neumann microphones, all signals are phase-aligned.

Content:

- 1.27 GB of samples (627 wavs/stereo/48 Khz/24 Bit), 7 background images for the UI, 8 single cycle waveforms, 4 wavetables.
- The content is not encrypted, so you can use the samples and wavetables in other samplers and synths or directly in your DAW.
- 41 patches combining many synthesis forms available in Falcon.
- Library size in total: 1.29 GB

Patch Categories

- Hang Instruments (15)
- Loops (3)
- Pads - Drones (7)
- Synth - Bass (4)
- Textures (12)

All audio demos for this library are [here](#).

A Youtube-playlist with all video demos for this library can be viewed [here](#).

CPU

The multi-granular engine with many grain streams and the synth oscillators with many unison voices can be somewhat CPU-hungry, so if a patch puts too much strain on your system whilst tracking, reduced the overall polyphony in Falcon and/or reduce the release time (all patches have a dedicated Macro assigned to “Release“). Also when mixing and not tracking I would advise you to raise the sample buffer in your DAW, as latency is not an issue in that case.

There is one patch (*Particle Stretch*) which uses the IRCAM Stretch oscillator and it’s spectral remix function, by design this oscillator is very CPU-hungry.

Patchlist

All descriptions from the alphabetic patchlist below can also be accessed via the Info-tab in the Falcon UI.

C3 refers to the middle C on a piano (C1 in classical terms).

AT = aftertouch, VEL = velocity, MW = modulation wheel, PB = pitch bend, L1 = layer 1, KG = keygroup, KS = keyswitch, WT = wavetable, OSC = oscillator, MS = multi-sampling

Hang Instruments	Description
Cave Hang	<p>Multi-sampled, spectrally re-synthesized and stretched mallet Hang accents sampled at 8 pitches between G1 – F#5, the tails are looped, the sample zones are crossfading, a velocity sensitive LP filter in L1 can be dialed in with a Macro.</p> <p>In L2 there is a stereo noise oscillator processed by a tuned bandpass filter, wave-shaper distortion can be dialed in, the noise synth has a dedicated volume control.</p> <p>MW adds tempo-synced, square-shaped pitch/filter/pan modulation in both layers, +1 octave with the wheel fully engaged. Full ADSR controls and a Macros for velocity sensitivity and sample start control via VEL are available, Thorus FX can be added to the Hang layer, there are more controls for Phasor/delay/reverb/limiter FX.18 Macros and 2 switches are installed.</p>
Hang 9Pitches Art Split	<p>Multi-sampled Hang, 2 articulations are split across the keyboard. Hard felt mallet articulation mapped between G0 – F2, hand articulation mapped between G3 – F5.</p> <p>All 9 pitches were sampled at 5 velocity layers / 6x round robin (540 samples are used in this patch).</p> <p>Only the 9 original pitches are mapped in this patch, to adjust the tonality of the Hang to your project use the bipolar “Coarse Transpose“ Macro (-/+ 6 semitones).</p> <p>As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered.</p> <p>Round robin mode is set to random cycle round robin (each oscillator will always be triggered once per cycle. Additionally, the first note of a cycle will never be the same as the last note of the previous cycle, so there won't be any direct repeats).</p> <p>20+ Macros are available for full ADSR control, panning randomization per note, EQ with 3 bands, Thorus/delay/convolution/algorithmic reverb/compressor/maximizer. MW adds pitch randomization per note.</p>

Hang Instruments	Description
Hang 9Pitches Art Switch	<p>Multi-sampled Hang played with a hard felt mallet in L1 (KS1 at A-1) and hands in L2 (KS2 at B-1), all 9 pitches were sampled at 5 velocity layers / 6x round robin (270 samples are used in this patch).</p> <p>As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered. Only the 9 original pitches are mapped in this patch, to adjust the tonality of the Hang to your project use the bipolar "Coarse Transpose" Macro (-/+ 6 semitones).</p> <p>Round robin mode is set to random cycle round robin (each oscillator will always be triggered once per cycle. Additionally, the first note of a cycle will never be the same as the last note of the previous cycle, so there won't be any direct repeats).</p> <p>20+ Macros are available for full ADSR control, panning randomization per note, EQ with 3 bands, Thorus/delay/convolution/algorithmic reverb/compressor/maximizer. MW adds pitch randomization per note.</p>
Hang Chromatic Art Split Featured in this video	<p>Multi-sampled Hang, 2 articulations are split across the keyboard, mapped chromatically. Hard felt mallet articulation mapped from C0 – B2, hand articulation mapped from C3 – C6.</p> <p>All 9 pitches were sampled at 5 velocity layers / 6x round robin (540 samples are used in this patch).</p> <p>As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered.</p> <p>Round robin mode is set to random cycle round robin (each oscillator will always be triggered once per cycle. Additionally, the first note of a cycle will never be the same as the last note of the previous cycle, so there won't be any direct repeats).</p> <p>20+ Macros are available for full ADSR control, panning randomization per note, EQ with 3 bands, Thorus/delay/convolution/algorithmic reverb/compressor/maximizer. MW adds pitch randomization per note.</p>
Hang Hand 9Pitches And Sub	<p>Multi-sampled Hang played with hands/fingers, all 9 pitches were sampled at 5 velocity layers / 6x round robin plus the backside of the instrument was sampled at 9x round robin (mapped to F2). 279 samples are used in this patch.</p> <p>As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered. Only the 9 original pitches plus the sub hits are mapped in this patch, to adjust the tonality of the Hang to your project use the bipolar "Coarse Transpose" Macro (-/+ 6 semitones).</p> <p>Two key-switches let you select the round robin mode, KS1 located at C0 selects cycle round robin (all 6 samples in a chain are played consecutively), KS2 at D0 selects random cycle round robin (Each oscillator will always be triggered once per cycle. Additionally, the first note of a cycle will never be the same as the last note of the previous cycle, so there won't be any direct repeats).</p> <p>20+ Macros are available for full ADSR control, panning randomization per note, EQ with 3 bands, distortion for the sub hits, Thorus/delay/convolution/algorithmic reverb/compressor/maximizer. MW adds pitch randomization per note.</p>

Hang Instruments	Description
Hang Hand Rain MS	<p>Multi-sampled finger roll tremolos on eight pitches of the Hang, samples are up to 40 seconds long and looped.</p> <p>There are 3 Macros for sample start position, sample start via VEL or randomized sample start, 4 Macros for full ADSR control, 3 bipolar Macros for EQ.</p> <p>As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered.</p> <p>The Filter Env-Macro introduces tempo-synced LP filter cutoff/resonance modulation (via multi envelope), more controls for Thorus/delay/convolution reverb/limiter FX are available, MW introduces a mixture of rotary and phaser FX (on layer level). 17 Macros and 2 switches are installed.</p>
Hang Hand RR6 5Vel 9Pitches	<p>Multi-sampled Hang played with hands, all 9 pitches were sampled at 5 velocity layers / 6x round robin (270 samples are used in this patch).</p> <p>As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered. Only the 9 original pitches are mapped in this patch, to adjust the tonality of the Hang to your project use the bipolar "Coarse Transpose" Macro (-/+ 6 semitones).</p> <p>Two key-switches let you select the round robin mode, KS1 located at C0 selects cycle round robin (all 6 samples in a chain are played consecutively), KS2 at D0 selects random cycle round robin (Each oscillator will always be triggered once per cycle. Additionally, the first note of a cycle will never be the same as the last note of the previous cycle, so there won't be any direct repeats).</p> <p>20+ Macros are available for full ADSR control, panning randomization per note, EQ with 3 bands, Thorus/delay/convolution/algorithmic reverb/compressor/maximizer. MW adds pitch randomization per note.</p>
Hang Hand RR6 5Vel Chromatic	<p>Multi-sampled Hang played with hands/fingers, all 9 pitches were sampled at 5 velocity layers / 6x round robin (270 samples are used in this patch). As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered. Only the 9 original pitches are mapped in this patch.</p> <p>Two key-switches let you select the round robin mode, KS1 located at C0 selects, KS1 located at C0 selects random cycle round robin (each oscillator will always be triggered once per cycle. Additionally, the first note of a cycle will never be the same as the last note of the previous cycle, so there won't be any direct repeats). KS2 (at D0) selects cycle round robin (all 6 samples in a chain are played consecutively).</p> <p>20+ Macros are available for full ADSR control, panning randomization per note, EQ with 3 bands, Thorus/delay/convolution/algorithmic reverb/compressor/maximizer. MW adds pitch randomization per note.</p>
Hang Tremolos MS	<p>Multi-sampled dynamic tremolos, all 9 pitches of the Hang were sampled, sample are looped, the last accent in each sample gets triggers on note release, there is a dedicated volume control for the release samples.</p> <p>Sample start modulation via VEL can be dialed in, full ADSR control is available, pan modulation per note can be dialed in with a Macro. MW introduces exciter FX on KG level.</p> <p>More controls for LP master cutoff/Thorus/delay/ convolution reverb/ algorithmic reverb/limiter FX are available. 17 Macros and 2 switches are installed.</p>

Hang Instruments	Description
<p>Mallet Hang 9Pitches And Sub</p> <p>Explained in this video</p>	<p>Multi-sampled Hang played with a hard felt mallet, all 9 pitches were sampled at 5 velocity layers / 6x round robin plus the backside of the instrument was sampled at 9x round robin (mapped to F2). 279 samples are used in this patch.</p> <p>As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered. Only the 9 original pitches plus the sub hits are mapped in this patch, to adjust the tonality of the Hang to your project use the bipolar "Coarse Transpose" Macro (-/+ 6 semitones).</p> <p>Two key-switches let you select the round robin mode, KS1 located at C0 selects cycle round robin (all 6 samples in a chain are played consecutively), KS2 at D0 selects random cycle round robin (Each oscillator will always be triggered once per cycle. Additionally, the first note of a cycle will never be the same as the last note of the previous cycle, so there won't be any direct repeats).</p> <p>20+ Macros are available for full ADSR control, panning randomization per note, EQ with 3 bands, distortion for the sub hits, Thorus/delay/convolution/algorithmic reverb/compressor/maximizer. MW adds pitch randomization per note.</p>
<p>Mallet Hang RR6 5Vel 9Pitches</p>	<p>Multi-sampled Hang played with a hard felt mallet, all 9 pitches were sampled at 5 velocity layers / 6x round robin (270 samples are used in this patch). As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered. Only the 9 original pitches are mapped in this patch, to adjust the tonality of the Hang to your project use the bipolar "Coarse Transpose" Macro (-/+ 6 semitones).</p> <p>Two key-switches let you select the round robin mode, KS1 located at C0 selects cycle round robin (all 6 samples in a chain are played consecutively), KS2 at D0 selects random cycle round robin (Each oscillator will always be triggered once per cycle. Additionally, the first note of a cycle will never be the same as the last note of the previous cycle, so there won't be any direct repeats).</p> <p>20+ Macros are available for full ADSR control, panning randomization per note, EQ with 3 bands, Thorus/delay/convolution/algorithmic reverb/compressor/maximizer. MW adds pitch randomization per note.</p>
<p>Mallet Hang RR6 5Vel Chromatic XT</p>	<p>Multi-sampled Hang played with a hard felt mallet, all 9 pitches were sampled at 5 velocity layers / 6x round robin (270 samples are used in this patch). As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered. The 9 sampled pitches are mapped chromatically in this patch, from C0 – B1 there is a synth bass sound (pluck oscillator using a Hang sample from velocity layer 5 to excite the resonators).</p> <p>Two key-switches let you select the round robin mode, KS1 located at C0 selects cycle round robin (all 6 samples in a chain are played consecutively), KS2 at D0 selects random cycle round robin (Each oscillator will always be triggered once per cycle. Additionally, the first note of a cycle will never be the same as the last note of the previous cycle, so there won't be any direct repeats).</p> <p>20+ Macros are available for full ADSR control, panning randomization per note, EQ with 3 bands, Thorus/delay/convolution/algorithmic reverb/compressor/maximizer. MW adds pitch randomization per note.</p>

Hang Instruments	Description
Mallet Hang RR6 5Vel Chromatic	<p>Multi-sampled Hang played with a hard felt mallet, all 9 pitches were sampled at 5 velocity layers / 6x round robin (270 samples are used in this patch). As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered. Only the 9 original pitches are mapped in this patch.</p> <p>Two key-switches let you select the round robin mode, KS1 located at C0 selects cycle round robin (all 6 samples in a chain are played consecutively), KS2 at D0 selects random cycle round robin (Each oscillator will always be triggered once per cycle. Additionally, the first note of a cycle will never be the same as the last note of the previous cycle, so there won't be any direct repeats).</p> <p>20+ Macros are available for full ADSR control, panning randomization per note, EQ with 3 bands, Thorus/delay/convolution/algorithmic reverb/compressor/maximizer. MW adds pitch randomization per note.</p>
Sub Hits RR9 Micro	<p>Hitting the backside of the Hang with the flat hand, sampled with 9x round robin. Tuning is set to quarter tones (key follow -> 50%) so two octaves on the keyboard equal one octave in actual pitch change.</p> <p>Randomize pitch, engage a velocity sensitive LP filter, add distortion (Diode Clipper) with the assigned Macros.</p> <p>More controls for attack/release/EQ/delay/convolution reverb/Maximizer FX are available.</p> <p>MW decreases sustain level, so velocity sensitive decay becomes active. PB is set to +/- 2 octaves.</p> <p>13 Macros and 2 switches are installed.</p>
Sub Tremolos Split	<p>Two tremolos played on the backside of the Hang, split across the keyboard, looping back and forth., root notes at F1/F4, split point: C3.</p> <p>Tuned comb-filtering and waveshaper distortion with modulated LP cutoff can be added with Macros. two controls for pan modulation depth/speed are assigned, an HP filter on layer level can be engaged. MW introduces tempo-synced, square-shaped pitch modulation (+1 octave) also for the tuned comb-filters, PB is set to +/- 1 octave (only affecting the samples).</p> <p>More controls for Thorus/delay/convolution reverb/ Maximizer FX are available. 14 Macros and 2 switches are installed.</p>

Loops	Description
Hang FM Loops	<p>Three Hang loops processed with some FX, played at 100 BPM running in tempo-synced stretch mode, each loop is mapped over two octaves, root notes at G1 - C3 - G5, stereo modulation (UVI wide on layer level) and wave-shaper amount can be controlled with 2 Macros.</p> <p>In a second layer each loop has it's dedicated FM sequence, mapped to the same keyboard ranges, the FM layer has a dedicated volume/pan modulation control, Thorus on layer level can be mixed in, LP filter modulation is happening on layer level. MW introduces tempo-synced, square-shaped pitch modulation +/- 1 octave with the wheel fully engaged (LFO phase inverted for the FM sounds).</p> <p>More controls for LP/HP filter cutoff/delay/reverb/limiter FX are available.</p> <p>12 Macros and an on/off-switch for the limiter are installed.</p>

Loops	Description
Hang Loop Mix featured in this video	<p>Six Hang loops played at 100 BPM running in tempo-synced stretch mode. Each loop is mapped over one octave the lower 4 have a root note of G, the upper two a root note of D.</p> <p>In a second layer there is a sequenced sub-bass synth glissando (via arpeggiator on layer level), two Macros control volume and tuning.</p> <p>A switch engages hybrid filter modulation via tempo-synced LFO1, two Macros control filter cutoff/resonance, another switch sets LFO speed from 1/16 to 1/32.</p> <p>More controls for wave-shaper mix/amount (on KG level - per voice) dynamic compression/limiter, master LP cutoff, delay/reverb are available.</p> <p>14 Macros and 4 switches are installed.</p>
Hang Loop Trio	<p>Three Hang loops played with hard felt mallets at different tempos, running in tempo-synced stretch mode (legato engaged), the loop in the lowest KG was processed with some FX.</p> <p>Each loop is mapped over two octaves, root notes at G1 - D3 - G5.</p> <p>MW introduces tempo-synced amplitude modulation via multi-envelope, several Macros control HP filter cutoff/resonance/drive, tempo-synced modulation amount via LFO1, wave-shaper mix/amount, stereo modulation (UVI wide module on layer level). More controls for dynamic compression/limiter, master LP cutoff, delay/reverb are available. 15 Macros and 2 switches are installed.</p>

Pads - Drones	Description
Floating Pad	<p>Wavetable pad using a WT extracted from a Hang accent. Dial in WT index modulation via LFO1 and phase distortion modulation via multi envelope with the assigned Macros, MW increases detune (which is also modulated via LFO2).</p> <p>Two modulated filters (parallel processing) are installed inside an FX rack, the BP filter has a dedicated volume control, the LO filter is always audible, dial in LP filter modulation with the assigned Macro.</p> <p>Tempo-synced amplitude/pan modulation can be added with the "Tremolo"-control.</p> <p>More controls for Thorus/delay/reverb/limiter FX are available.</p> <p>13 Macros and 2 switches are installed.</p>
Granular Harmonics Featured in this video	<p>Wave-tabled/spectralized rubberball Hang textures running in multi-granular mode with zone crossfades between A#2 - G3 , two pitches were sampled at C1/C3, mapped one octave higher in Falcon (C3 sounds C2).</p> <p>Granular controls for speed/perforation/position (also via AT) are installed, MW randomizes grain pitch. An analog LP filter has a cutoff control, with the cutoff Macro dialed to the left, slow, tempo-synced filter modulation can be engaged with another Macro.</p> <p>In a 2nd layer there is an analog stack drone with PWM and filter modulation (on layer level), control overall volume and volume of the sub-oscillator (OSC4) with 2 Macros.</p> <p>More controls for Thorus/delay/reverb/limiter FX are available.</p> <p>15 Macros and an on/off-switch for the limiter are installed.</p>
Moving	<p>Wavetable pad, the WT in this patch was extracted from a Hang tremolo.</p> <p>Independent LFOs modulate WT index/detune/phase distortion, with the assigned Macro engaged, AT increases unison detune.</p> <p>Two modulated filters can be mixed with the dry signals (FX rack on KG level -> Phazor/LP filter and waveshaper, both with key follow -> 100%), MW introduces tempo-synced amplitude modulation (via multi envelope/square-shaped LFO).</p> <p>MW introduces tempo-synced amplitude modulation via multi envelope 2/LFO5.</p> <p>More controls for Thorus/delay/reverb/limiter FX are available.</p> <p>12 Macros and 2 switches are installed.</p>

Pads - Drones	Description
Rain Drone Pad	<p>Multi-sampled WT pad (5 pitches) with a WT extracted from a Hang tremolo in HALion 6, the oscillators are running in multi-granular mode using 5 grain streams, grain spread is modulated via LFO 1.</p> <p>Granular controls for grain speed/size are installed, grain position can be controlled via AT with the respective Macro dialed in.</p> <p>Tempo-synced amplitude (triplet based) and slow pan modulation can be dialed in, hybrid filter modulation amount/speed can be controlled with 2 Macros, a modulated formant filter on layer level (parallel processing) can be mixed in with a Macro, formant filter modulation speed can be controlled with another control.</p> <p>A bipolar Macro assigned to the UVI filter on program level let's you control LP/HP filter cutoff.</p> <p>More controls for phaser/delay/reverb/limiter FX are available. MW detunes the grains. 19 Macros are installed.</p>
Resonant Drone	<p>A long processed Hang scape exciting the resonators in the pluck oscillator, sample start is randomized. In a 2nd multi-granular oscillator there is a Hang tremolo texture played with hands on all pitches of the instrument, control it's volume with the assigned Macro, grain speed/position are randomized.</p> <p>The pluck oscillator is set to inharmonic/sustain/stretch mode, control the decay of the resonances and modulation of the stretch parameter via LFO with the assigned Macros. MW decouples the two strings, creating RM-like effects and randomizes grain pitch in OSC2. Tune string two up a perfect fifth/octave with a Macro (scaled via mapper).</p> <p>More Macros let you dial in tempo-synced LP filter cutoff/resonance/drive modulation, Thorus/delay/reverb/limiter FX. 15 Macros and 2 switches are assigned.</p>
Spectral Melange	<p>The samples for this patch were made by layering a wave-tabled Hang tremolo drone with spectrally re-synthesized Hang tremolo sounds, three pitches were sampled at C1 - C3 - D4. L1 runs in multi-granular mode (4 voices), three granular controls for grain speed/perforation and position control via AT are available.</p> <p>In a second layer only the FX tail of each sample is mapped using zone-crossfades, each layer has its dedicated volume control. MW randomizes grain pitch and introduces fast random pitch modulation in L2.</p> <p>Macros for dialing in tempo-synced amplitude modulation (via multi envelope), amp mod smoothing, pan modulation per note, LP filter modulation via tempo-synced LFO, master LP/HP filter, delay/Phasor/reverb/limiter FX are available.</p> <p>20 Macros and an on/off-switch for the limiter are installed.</p>
Sub Drone Layers KS	<p>The samples for this patch were made by re-synthesizing/layering a tremolo played on the backside of the Hang, three pitches were sampled at C1 - G2 - D4.</p> <p>L1 (KS 1+2) runs in multi-granular mode (4 voices), two granular controls for grain speed and grain position control via AT are available.</p> <p>In a second layer (KS2) the same samples are playing in normal sampling mode, wave-shaper distortion can be dial in with a Macro, when this layer is selected via KS2 (located at B-1), the volume control becomes active.</p> <p>MW randomizes grain pitch and introduces pitch modulation in L2. Macros for controlling the amount of tempo-synced amplitude modulation, LP filter modulation, filter modulation speed are installed. More controls for master LP/HP filter, delay/Phasor/reverb/limiter FX are available.</p> <p>19 Macros and an on/off-switch for the limiter are installed.</p>

Synth - Bass	Description
Attacker Synth	<p>Two layered WT oscillators using WTs extracted from Hang accents, the second OSC is tuned up an octave and has a dedicated volume control.</p> <p>WT index, phase distortion and detune are modulated by a velocity sensitive envelope, an LFO kicking in with a delay is also modulating these parameters. MW adds a fast pitch envelope adding more ZAPP to the sound.</p> <p>An LP filter modulated by the same envelope can be introduced with the assigned Macro, distortion can be dialed in with another control.</p> <p>More controls for Thorus/compressor/EQ/delay and reverb FX are available. 14 Macros and an on/off-switch for the compressor are installed.</p>
Clay Bass	<p>Two accents with different pitches played on the backside of the Hang mapped in two crossfading velocity zones. L2 adds a pluck OSC using one of the accents to excite the resonators, L2 has a dedicated volume control.</p> <p>A resonant peak filter with some distortion can be dialed in, a fast pitch glissando during the attack phase can be added with a Macro, LP cutoff can be controlled, the Dynamics-switch adds dynamic compression/gating to the Hang layer.</p> <p>More controls for short delay mix/convolution/long delay mix/Maximizer FX are available. 11 Macros and 2 switches are installed.</p>
Club Bass	<p>Lowest Hang pitch played with mallet sampled at 4x RR, layered with an FM and an analog sub-oscillator, each sound has its dedicated volume control. Add more waveshaper distortion to the Hang with the installed Macro, more controls for master LP/HP cutoff, diffusion/convolution reverb and Maximizer FX are available. 8 Macros and 2 switches are installed.</p>
Hang FM	<p>The lower three velocity layers from the mallet Hang, sampled at 6x round robin, layered with an FM synth in L2, running in unison mode (2 voices) with unison stereo spread and a bit of randomized unison detune. The FM synth has a dedicated volume control. MW adds fast, noise-shaped pitch modulation.</p> <p>A velocity sensitive waveshaper can be dialed in the Hang layer, sustain/release for the Hang sound can be controlled with 2 Macros, more Macros are available for compressor/Thorus/delay/reverb/Maximizer FX. 12 Macros and 2 switches are installed.</p>

Textures	Description
<p>Bouncing Balls Split KS</p> <p>Featured in this video</p>	<p>The samples for this patch were made by inserting 20+ little rubber balls into the Hang and slowly shaking the instrument resulting in delicate pentatonic textures.</p> <p>Two split pairs can be selected via key.switches (A-1/B-1), the oscillators are running in multi-granular mode (4 voices).</p> <p>Five granular controls for grain speed/structure (affecting size - density - jitter)/spread/ position and position control via AT are available. MW randomizes grain pitch.</p> <p>Macros for controlling HP filter modulation (on program level), pan modulation per note, pan modulation speed, exciter, master LP filter, Thorus/delay/reverb/limiter FX are available.</p> <p>19 Macros and 2 switches are installed.</p>

Textures	Description
Galaxy Scapes Split	<p>Upper register, mapped from C3 – C7: processed Hang texture, improvising on the instrument with drumsticks. The oscillator is running in multi-granular mode (5 voices), 3 granular controls for grain position/speed/pitch randomization are available</p> <p>Lower register, mapped from C0 – B2: processed Hang texture, improvising on the instrument with hands. The oscillator is running in normal sampler mode, control sample start point and/or sample start point modulation via VEL with the installed Macros.</p> <p>Both textures are layered with their own FX tails (sampling oscillators) in L2 which has a dedicated volume control. A bipolar Macro tunes the tails down/up 1 octave. Hybrid filter modulation on program level can be dialed in, another Macro controls filter modulation speed, a bipolar macro controls LP/HP filter cutoff.</p> <p>MW adds tempo-synced amplitude/pan modulation (tremolo/auto-pan FX on program level).</p> <p>More controls for delay/reverb/limiter FX are available.</p> <p>16 Macros and 2 switches are installed.</p>
Hang Scapes Split KS	<p>Two processed Hang impros, running in granular mode, split across the keyboard, split point: C3. In L2 two synth drones provide the root notes, KS1 (A-1) only selects the Hang scapes, KS2 (B-1) selects both layers, control the drone volume with the assigned Macro.</p> <p>Six granular controls for speed/size/density/ spread modulation via LFO/grain position and grain position modulation via AT are available.</p> <p>Waveshaper distortion(per voice on KG level) can be dialed in, two Macros for pan modulation (per voice) and panning speed are available.</p> <p>A modulated hybrid filter for the Hang scapes (on layer level) can be dialed in, there are more controls for delay/reverb/limiter FX.</p> <p>18 Macros and an on/off-switch for the limiter are installed.</p>
Light And Shadow Split	<p>Upper register, mapped from C2 – C7 is a processed Hang texture playing in granular mode. A multi envelope in legato mode is modulating grain position so the sample won't re-trigger if you play overlapping notes. Control envelope speed and grain size with two Macros, another control introduces random, tempo-synced grain position modulation (via LFO2) and tempo-synced amplitude modulation (LFO1).</p> <p>In the lower register there is a drone sample derived from a wave-tabled Hang tremolo, the drone is layered with it's own FX tail processed by a wave-shaper, the tail has a dedicated volume control, tempo-synced amplitude modulation (ramp up) can be dialed in with a Macro.</p> <p>Hybrid filter modulation (layer level) can be dialed in with a Macro, more controls for flanger/delay/reverb/limiter FX are available. MW randomizes grain pitch in the upper sounds and adds pitch modulation in the lower sound.</p> <p>14 Macros and an on/off-switch for the limiter are installed.</p>
Liquid Textures Split	<p>Two processed Hang textures split across the keyboard, running in granular mode (5 voices), 7 granular controls are installed for speed, grain size (and more) modulation, modulation speed, pitch randomization, grain position (also via AT), grain spread.</p> <p>The “Hybrid Filter“-Macro adds hybrid filter modulation on layer level via 2 LFOs (parallel processing inside FX Rack).</p> <p>MW adds tuned Phasor filter (on KG level) with tempo-synced, re-triggering cutoff/ spread/feedback modulations.</p> <p>More controls for master LP filter/delay/reverb/limiter FX are available.</p> <p>16 Macros and 2 switches are installed.</p>

Textures	Description
Mallet Hang Granular	<p>A granular version of the mallet Hang with 5 velocity layers but without round robin. Grain seed is set to zero, a slow LFO is modulation grain position, hovering around the sample start points, with the respective Macro engaged, AT shifts grain position and adds waveshaper distortion, Granular controls for density/grain size/grain reverse are available.</p> <p>As the original tuning of the Hang deviates somewhat from the normal tempered tuning (between 17 and 42 cents above tempered tuning -> 440Hz) you can dial in tempered tuning with a Macro, dialed hard right all pitches are 100% tempered. Another Macro adds square-shaped, tempo.synced pitch modulation, +1 octave with the control fully engaged, MW randomizes grain pitch.</p> <p>23 Macros and 4 switches are available for full ADSR control, pan modulation per note, hybrid filter modulation on layer level, EQ with 3 bands, Thorus /delay/ convolution/ algorithmic reverb/maximizer.</p>
Particle Stretch (High CPU)	<p>Playing the individual pitches of the Hang with a rubberball mounted on a stick. OSC type is set to IRCAM Stretch (high CPU), the Remix function is engaged and the three individual spectral components (sine/transients/noise) are modulated by individual LFOs running at different speeds. The "Compress-Macro controls limiter threshold (on layer level).</p> <p>Control time-stretch speed and sample start with the assigned Macros, pan modulation per voice can be added and panning speed is controllable.</p> <p>More Macros for LP/HP filter cutoff, Phasor/delay/reverb FX are available, MW adds vibrato. Polyphony is set to 3 voices.</p> <p>13 Macros and a "Freeze"-switch for the reverb are installed.</p>
Raining Hands	<p>Tremolating on various pitches of the Hang with fingers of both hands, KG1 plays the unprocessed sample, KG2 the processed sample, both KGs have a dedicated volume control and use the multi-granular oscillators (3 voices), granular controls for grain spread/density/speed/ grain reverse, grain position control via AT and grain size modulation (via LFO3) are available.</p> <p>MW randomizes grain pitch.</p> <p>Tuned comb-filtering can be dialed in for the unprocessed texture, controls for pan modulation per voice, hybrid filter modulation (on program level) and filter modulation speed are installed.</p> <p>More controls for Thorus/delay/reverb/limiter FX are available.</p> <p>18 macros and 3 switches are installed.</p>
Sparse Grains	<p>L1: Granulated Hang textures, improvising on the Hang with drum sticks and felt mallets, two multi-granular oscillators are layered, the 2nd one playing the sample in opposite direction and switching between forward/reversed grains, With the "AmpMod"-Macro engaged, slow LFOs with inverted phases modulated the volume of each KG.</p> <p>Two controls for grain speed/density are available, tuned comb-filtering and Thorus FX can be mixed in with dedicated controls, slow LP filter cutoff modulation on layer level is assigned to a Macro.</p> <p>L2: Analog stack synth using square-shaped SYNC-modulation with randomized LFO speed, this layer has a dedicated volume control.</p> <p>MW randomizes pitches in L1 and adds random pitch modulation in the synth layer.</p> <p>More controls for delay/reverb/limiter FX are available.</p> <p>16 Macros and 2 switches are installed.</p>

Textures	Description
Spectral Sticks Split KS	<p>A long soundscape sample made from/with a processed texture playing the Hang with drum sticks. This sample is divided into six segments (multi-granular mode) split across the keyboard in two key-switchable layers (3 in each layer), split points are C2/C5. KS1 – A-2, KS2 – B-2</p> <p>Granular controls for speed (inverted) and grain perforation are available. Tuned comb-filters can be mixed with the dry signal (FX rack on KG level), MW randomizes grain pitch.</p> <p>More controls for master LP/HP filter/Thorus/delay/reverb/ limiter FX are available. 13 Macros and 2 switches are installed.</p>
Sub Strings	<p>Two layered pluck oscillators, slightly panned L-R, each one using a different tremolo sample played on the backside of the Hang to excite the string resonators. MW shifts the harmonics, there is a Macro for the decay time of the strings, exciter FX per voice and pan modulation per voice can be dialed in, a tempo-synced, velocity sensitive LP filter envelope can be engaged with a Macro.</p> <p>A compressor on layer level can be engaged, the EQ has a low cut and a bipolar high frequency control, full ADSR controls and Macros for Thorus/delay/reverb/ limiter FX are available. 17 Macros and 2 switches are installed.</p>
Tremolo Grains Split	<p>Upper register: Hang tremolo swells played with mallets, running in granular mode (5 voices).</p> <p>Lower register: Finger roll tremolo played on various pitches, also running in granular mode (4 voices). Split point: C3</p> <p>LFO modulation applied to grain spread/speed and other things, control grain density with the assigned control, MW randomizes grain pitch. With the tuned comb-filtering engaged (via Macro) this can create interesting harmonics.</p> <p>HP/Notch-filtering can be dialed in with a Macro, the UVI Wide-module provides extra stereo modulation (assigned to Macro), extra pan modulation per voices can be dialed in with another control, panning speed also has a Macro assigned.</p> <p>More controls for master LP filter, flanger, delay, reverb, limiter FX are available. 17 Macros and 2 switches are assigned.</p>

Please enjoy the sounds!

Simon Stockhausen, March 25th - 2017