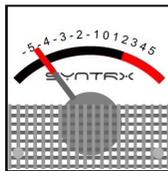




FEATURED

SYNTRX: Patch Notes





CHANNEL 1 OUTPUT CHANNEL 2

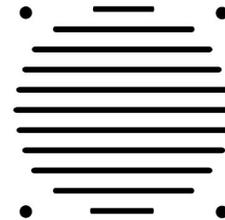
LEVEL PAN LEVEL PAN

INPUT OUTPUT FILTER

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH

MUTE



OSCILLATOR 1

1Hz 10KHz

30

100-0

W SHAPE M

LEVEL

FILTER / OSCILLATOR

FREQUENCY RESPONSE LEVEL

LOWPASS 0 10 OSC

RING MODULATOR REVERB

LEVEL MIX FEEDBACK

OSCILLATOR 2

1Hz 10KHz

30

100-0

W SHAPE M

LEVEL

SIGNAL INPUTS CONTROL INPUTS

Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	Noise	Input	Filter	Trapezoid	Env signal	Ring mod	Reverb	Joystick			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

TRAPEZOID

ATTACK ON DECAY

OFF MANUAL

TRAPEZOID SIGNAL

OSCILLATOR 3

0.05Hz 500Hz

73

100-0

W SHAPE M

LEVEL

SOURCES TREATMENTS

Output Ch1

Output Ch2

Oscillator 1

Oscillator 2

Oscillator 3

Noise

Input

Filter

Trapezoid

Env signal

Ring mod

Reverb

Joystick

NOISE GENERATOR S & H

COLOUR LEVEL RATE LEVEL

LOW HIGH

VCO3 IN

VCO3 S&H

VCO3 S&H OUT

NOISE GENERATOR S & H

COLOUR LEVEL RATE LEVEL

LOW HIGH

VCO3 IN

VCO3 S&H

VCO3 S&H OUT

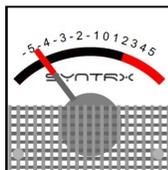
RECALL SAVE SHIFT

SYNTAX

LEVEL ATTACK

Hard Sync Bass

OSCS 2&3 synced to OSC1 and sent to the filter and then through envelope signal (VCA) - to the output. OSC2 frequency & Envelope decay are modulated by sample&hold; the Filter Frequency is modulated by Trapezoid. The Joystick controls the OSC2 frequency and the Filter cutoff frequency.



CHANNEL 1 OUTPUT CHANNEL 2

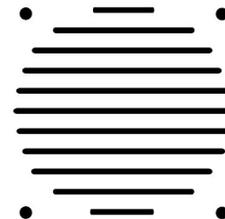
LEVEL PAN LEVEL PAN

INPUT OUTPUT FILTER

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH

MUTE



OSCILLATOR 1

1Hz 10KHz

21

100-0

W SHAPE M

LEVEL

FILTER / OSCILLATOR

FREQUENCY RESPONSE LEVEL

LOWPASS 0 10 OSC

RING MODULATOR REVERB

LEVEL MIX FEEDBACK

DRY 0 10 WET

OSCILLATOR 2

1Hz 10KHz

39

100-0

W SHAPE M

LEVEL

SIGNAL INPUTS CONTROL INPUTS

Output Ch1, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3, Noise, Input, Filter, Trapezoid, Env. signal, Ring mod, Reverb, Joystick

1-16

TRAPEZOID

ATTACK ON DECAY

OFF 10 MANUAL

TRAPEZOID SIGNAL

OSCILLATOR 3

0.05Hz 500Hz

47

100-0

W SHAPE M

LEVEL

TREATMENTS

AB C D E F G H I J K L M N O P

TRAPEZOID

ATTACK

NOISE GENERATOR S & H

COLOUR LEVEL RATE LEVEL

LOW HIGH

VCO3 IN VCO3 SBH VCO3-SBH OUT

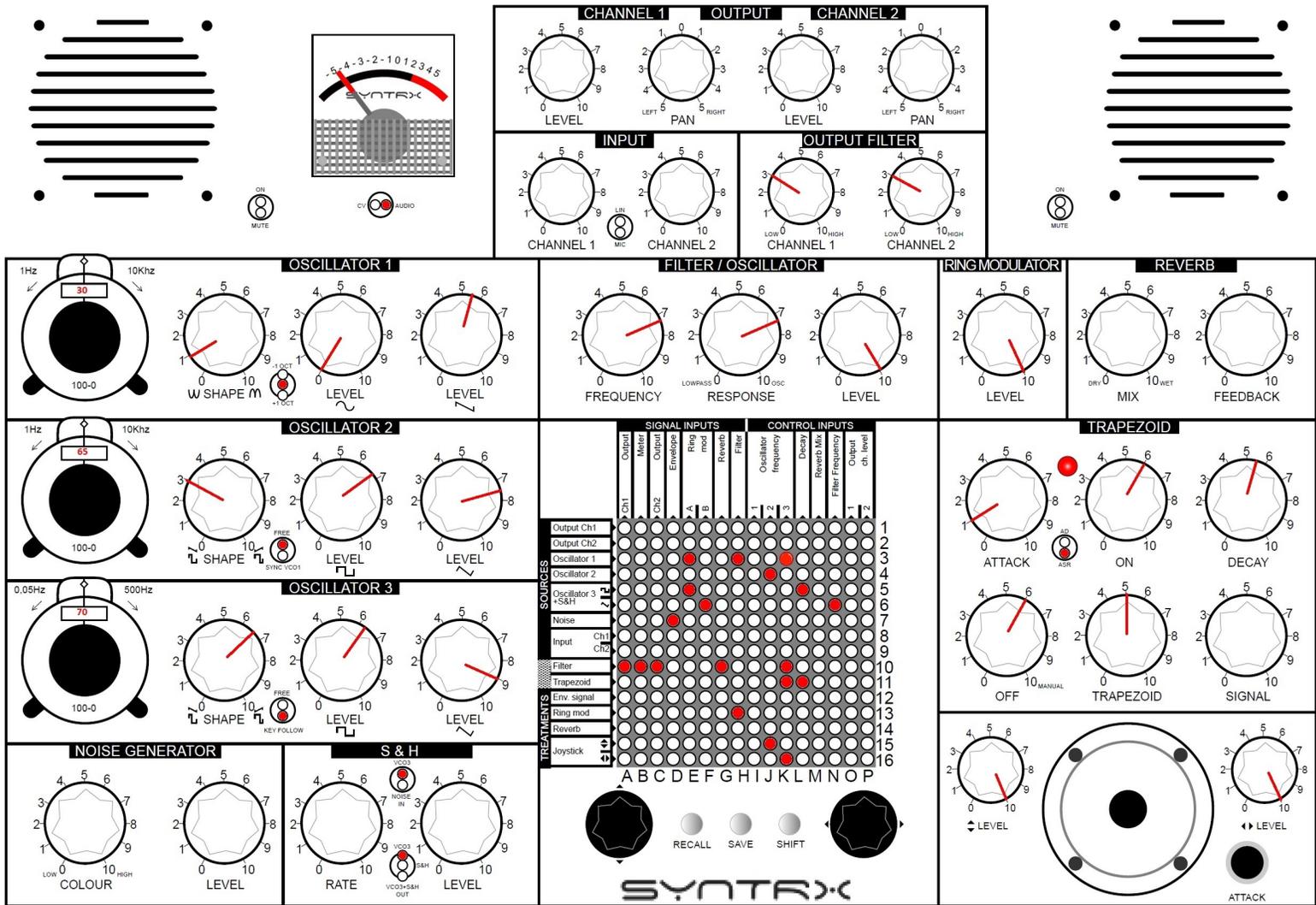
RECALL SAVE SHIFT

SYNTAX

LEVEL ATTACK

Jungle Bass

The OSC1 - main subbas tone (sine); the OSC2 - sweep tone (saw); the OSC2 is modulated by OSC3; the Filter Frequency is modulated by the Trapezoid; the Joystick changes the OSC3 frequency. Tune the OSC1 and search the best frequency and amplitude for sweep tone, play with the OSC3 frequency (controlled by the Joystick) and level.



Noise Machine 1

The OSC3 and the OSC1 are ringmodulated and sent to the Filter with the OSC1 direct signal. The OSC2 is synced to the OSC1 and self-modulated. The OSC3 is modulated by the OSC1 and the Trapezoid. The Filter cutoff frequency is modulated by the OSC3. Play with the OSCs frequency (the Joystick controls the OSC2 and the OSC3 frequency) and Trapezoid settings.

SYNTAX AUDIO

CHANNEL 1 OUTPUT CHANNEL 2

LEVEL PAN LEVEL PAN

INPUT OUTPUT FILTER

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

OSCILLATOR 1

1Hz 10KHz 35 100-0 W SHAPE M LEVEL

OSCILLATOR 2

1Hz 10KHz 45 100-0 L SHAPE M LEVEL

OSCILLATOR 3

0.05Hz 500Hz 65 100-0 L SHAPE M LEVEL

NOISE GENERATOR

COLOUR LEVEL

S & H

RATE LEVEL

FILTER / OSCILLATOR

FREQUENCY RESPONSE LEVEL

RING MODULATOR

LEVEL

REVERB

MIX FEEDBACK

TRAPEZOID

ATTACK ON DECAY OFF TRAPEZOID SIGNAL

SIGNAL INPUTS CONTROL INPUTS

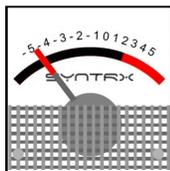
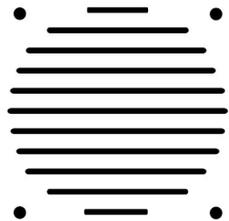
SOURCES	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	SBH	Noise	Input	Ch1	Ch2	Filter	Trapezoid	Env signal	Ring mod	Reverb	loystick
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																

RECALL SAVE SHIFT

SYNTAX

Noise Machine 2

The OSC1 and the OSC3 pass through the Ringmodulator to the Filter; OSC1, OSC2 and the Noise are patched straight to the Filter. The Filter cutoff frequency and the Envelope decay is modulated by sample&hold. Play with Envelope settings for random timing and the Oscillator shapes for timbral changes.



CHANNEL 1 OUTPUT CHANNEL 2

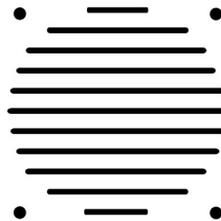
LEVEL PAN LEVEL PAN

INPUT **OUTPUT FILTER**

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH

MUTE



OSCILLATOR 1

1Hz 10KHz

100-0

W SHAPE M

LEVEL

FILTER / OSCILLATOR

FREQUENCY RESPONSE LEVEL

LOWPASS 0 10 OSC

RING MODULATOR **REVERB**

LEVEL MIX FEEDBACK

DRY 0 10 WET

OSCILLATOR 2

1Hz 10KHz

100-0

L SHAPE M

LEVEL

SIGNAL INPUTS **CONTROL INPUTS**

Output Ch1, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3, Noise, Input, Filter, Trapezoid, Env signal, Ring mod, Reverb, Joystick

Output, Mixer, Output, Envelope, Ring mod, Reverb, Oscillator Frequency, Decay, Reverb Mix, Filter Frequency, Output ch. level

SOURCES

TREATMENTS

1-16

A-O P

TRAPEZOID

ATTACK ON DECAY

OFF 10 MANUAL

TRAPEZOID SIGNAL

OSCILLATOR 3

0.05Hz 500Hz

100-0

L SHAPE M

LEVEL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

LOW HIGH

VCO3 IN, VCO3 SH, VCO3-S&H OUT

RECALL SAVE SHIFT

SYNTAX

LEVEL

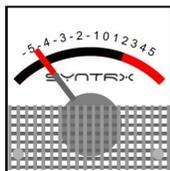
ATTACK

LEVEL

ATTACK

Snow under the boots

A wide palette of white noise based texture sound effects. The Noise Generator modulated with the sample&hold in the Ringmodulator pass through the Filter, modulated by sample&hold, too. Play with the Noise Generator colour, the Filter cutoff (controlled by the Joystick) and the sample&hold rate and level. In order to add some space, turn on the Spring Reverb.



CHANNEL 1 OUTPUT CHANNEL 2

LEVEL PAN LEVEL PAN

INPUT OUTPUT FILTER

CHANNEL 1 MIC CHANNEL 2 LOW HIGH CHANNEL 1 LOW HIGH CHANNEL 2



OSCILLATOR 1

1Hz 10KHz

100-0

W SHAPE M

LEVEL

FILTER / OSCILLATOR

FREQUENCY RESPONSE LEVEL

RING MODULATOR REVERB

LEVEL MIX FEEDBACK

OSCILLATOR 2

1Hz 10KHz

100-0

W SHAPE M

LEVEL

SIGNAL INPUTS CONTROL INPUTS

Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	SSM1	Noise	Input	Filter	Trapezoid	Env signal	Ring mod	Reverb	Joystick
1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28

A B C D E F G H I J K L M N O P

TRAPEZOID

ATTACK ON DECAY

OFF TRAPEZOID SIGNAL

OSCILLATOR 3

0.05Hz 500Hz

100-0

W SHAPE M

LEVEL

NOISE GENERATOR S & H

COLOUR LEVEL RATE LEVEL

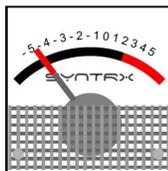
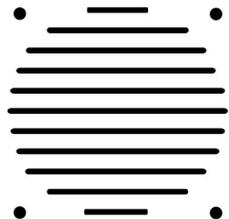
RECALL SAVE SHIFT

SYNTAX

LEVEL ATTACK

hihat Machine

A hihat grooves with variable accents and time divisions. The Ringmodulator modulates noise signal with a sample&hold; The Filter cutoff frequency is modulated by sample & hold. The Trapezoid modulates synced, crossmodulated OSCs for variable accents. Play with the Joystick to change time divisions and the Filter cutoff frequency.



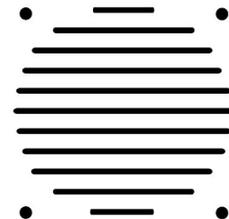
CHANNEL 1 OUTPUT CHANNEL 2

LEVEL PAN LEVEL PAN

INPUT OUTPUT FILTER

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH



OSCILLATOR 1

1Hz 10KHz

65

100-0

W SHAPE M

LEVEL

FILTER / OSCILLATOR

FREQUENCY RESPONSE LEVEL

LOWPASS 0 10 OSC

RING MODULATOR REVERB

LEVEL MIX FEEDBACK

DRY 0 10 WET

OSCILLATOR 2

1Hz 10KHz

22

100-0

W SHAPE M

LEVEL

SIGNAL INPUTS CONTROL INPUTS

Output Ch1, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3, Noise, Input, Filter, Trapezoid, Env signal, Ring mod, Reverb, Joystick

Output Ch1, Mixer, Output, Envelope, Ring mod, Reverb, Filter, Oscillator Frequency, Decay, Reverb Mix, Filter Frequency, Output ch. level

SOURCES TREATMENTS

1-16

A-P

TRAPEZOID

ATTACK ON DECAY

OFF MANUAL TRAPEZOID SIGNAL

ASR

OSCILLATOR 3

0.05Hz 500Hz

32

100-0

W SHAPE M

LEVEL

RECALL SAVE SHIFT

SYNTRX

TRAPEZOID

ATTACK

NOISE GENERATOR S & H

COLOUR LEVEL RATE LEVEL

LOW HIGH

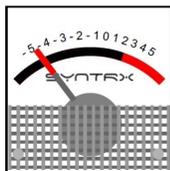
VCO3 IN VCO3 SBH VCO3+SBH OUT

TRAPEZOID

ATTACK

Industrial Bass

The internal SYNTRX sequence realized with the sample&hold and crossmodulated Oscillators. A stereo effect and sharper sound is achieved by routing the Filter to the OUT1 and the Ringmodulator to the OUT2. Change groove with the OSC3, tone with the OSC1.



CHANNEL 1 OUTPUT CHANNEL 2

LEVEL PAN LEVEL PAN

INPUT OUTPUT FILTER

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH



OSCILLATOR 1

1Hz 10KHz

40

100-0

W SHAPE M

LEVEL

FILTER / OSCILLATOR

FREQUENCY RESPONSE LEVEL

LOWPASS 0 10 OSC

RING MODULATOR REVERB

LEVEL MIX FEEDBACK

DRY 0 10 WET

OSCILLATOR 2

1Hz 10KHz

36

100-0

L SHAPE M

LEVEL

SIGNAL INPUTS CONTROL INPUTS

Output Ch1, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3, Noise, Input, Filter, Trapezoid, Env signal, Ring mod, Reverb, Joystick

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

A B C D E F G H I J K L M N O P

TRAPEZOID

ATTACK ON DECAY

OFF 10 MANUAL

TRAPEZOID SIGNAL

OSCILLATOR 3

0.05Hz 500Hz

32

100-0

L SHAPE M

LEVEL

NOISE GENERATOR S & H

COLOUR LEVEL RATE LEVEL

LOW HIGH

VCO3 IN VCO3 SBH VCO3-SBH OUT

RECALL SAVE SHIFT

SYNTAX

LEVEL ATTACK

FM Streams

Crossmodulated, synced oscillators in parallel to the Ringmodulator and the Filter for stereo effect, modulated by sample&hold. Play with the Oscillator frequencies & levels.

SYNTAX AUDIO

CHANNEL 1 OUTPUT CHANNEL 2

LEVEL PAN LEVEL PAN

INPUT OUTPUT FILTER

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

OSCILLATOR 1

1Hz 10kHz 44 100-0 W SHAPE M LEVEL

OSCILLATOR 2

1Hz 10kHz 45 100-0 L SHAPE M SYNC VCO1 LEVEL

OSCILLATOR 3

0.05Hz 500Hz 74 100-0 L SHAPE M KEY FOLLOW LEVEL

NOISE GENERATOR

COLOUR LEVEL

S & H

RATE LEVEL

FILTER / OSCILLATOR

FREQUENCY RESPONSE LEVEL

RING MODULATOR

LEVEL

REVERB

MIX FEEDBACK

TRAPEZOID

ATTACK ON DECAY OFF TRAPEZOID SIGNAL

SIGNAL INPUTS CONTROL INPUTS

SOURCES	TREATMENTS	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	Noise	Input	Filter	Env signal	Ring mod	Reverb	ASR
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													

AB C D E F G H I J K L M N O P

RECALL SAVE SHIFT

SYNTAX

LEVEL ATTACK

idm lead

A patch for pluck sounds. This is accomplished by passing oscillator signals through the interconnected Envelope (VCA) and Filter. Tuned OSC1 is synced with the OSC3; the OSC2 is free running and slightly detuned from the OSC1. The Trapezoid ringmodulates the Noise and the OSC2. Reverb mix is also modulated by the Trapezoid. Play with Envelope attack for variations.

CHANNEL 1 OUTPUT CHANNEL 2

LEVEL PAN LEVEL PAN

INPUT OUTPUT FILTER

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

OSCILLATOR 1

1Hz 10KHz 44 100-0 W SHAPE M LEVEL

OSCILLATOR 2

1Hz 10KHz 85 100-0 W SHAPE M LEVEL

OSCILLATOR 3

0.05Hz 500Hz 62 100-0 W SHAPE M LEVEL

NOISE GENERATOR

COLOUR LEVEL

S & H

RATE LEVEL

FILTER / OSCILLATOR

FREQUENCY RESPONSE LEVEL

RING MODULATOR

LEVEL

REVERB

MIX FEEDBACK

TRAPEZOID

ATTACK ON DECAY OFF TRAPEZOID SIGNAL

SIGNAL INPUTS

Output Ch1, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3, Noise, Input, Filter, Trapezoid, Env signal, Ring mod, Reverb, Joystick

CONTROL INPUTS

Reverb, Oscillator Frequency, Decay, Reverb Mix, Filter Frequency, Output ch. level

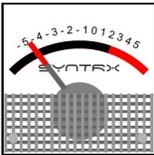
TREATMENTS

RECALL SAVE SHIFT

SYNTAX

Acid Bass

A complex patch with synced Oscillators. The OSC2 is swept by the Trapezoid and connected to the Reverberator. The OSC2 frequency and the Filter cutoff frequency is modulated by the OSC3. In order to achieve the stereo effect Output channel levels are modulated by the OSC1 (1) and the OSC2 (2). Play with the Joystick (it controls the OSC2 and the Filter cutoff frequency), the Trapezoid for a sweep amplitude and the OSC3 saw level to control a timbre.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL LEFT PAN RIGHT LEVEL LEFT PAN RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW MIC LOW HIGH LOW HIGH



OSCILLATOR 1

1Hz 10kHz

100-0

W SHAPE M

LEVEL

FILTER / OSCILLATOR

FREQUENCY LOWPASS RESPONSE OSC LEVEL

RING MODULATOR **REVERB**

LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2

1Hz 10kHz

100-0

Z SHAPE M

LEVEL

SIGNAL INPUTS **CONTROL INPUTS**

Output Ch1, Meter, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3, Noise, Input Ch1, Input Ch2, Filter, Trapezoid, Env. signal, Ring mod, Reverb, Joystick

Output, Filter frequency, Delay, Reverb Mix, Reverb Frequency, Output ch. level

TRAPEZOID

ATTACK ON DECAY

OSCILLATOR 3

0.05Hz 500Hz

100-0

U SHAPE M

LEVEL

SOURCES

Output Ch1, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3, Noise, Input Ch1, Input Ch2, Filter, Trapezoid, Env. signal, Ring mod, Reverb, Joystick

TREATMENTS

Output, Filter frequency, Delay, Reverb Mix, Reverb Frequency, Output ch. level

TRAPEZOID

OFF MANUAL TRAPEZOID SIGNAL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

A B C D E F G H I J K L M N O P

RECALL SAVE SHIFT

LEVEL ATTACK

SYNTRX

Springs

A patch for resonating pulsatile noise textures. Signals from the Oscillators and the Noise Generator go through the Filter to the Envelope (VCA) and finally to the Outputs. In parallel the signal after the Filter passes through the Reverb to the Outputs. The OSC2 and the Filter frequency and the Trapezoid decay are modulated by Sample&Hold; the OSC2 and the Reverb mix is modulated by Trapezoid. For tone and timbre changes play with Joystick (OSC1 & OSC2 frequencies), Noise colour and Reverb mix; for tempo and groove changes play with the OSC3 frequency and the Trapezoid settings.

CHANNEL 1 OUTPUT CHANNEL 2

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT OUTPUT FILTER

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH

OSCILLATOR 1

1Hz 10KHz 30 100-0 W SHAPE M LEVEL LEVEL

OSCILLATOR 2

1Hz 10KHz 30 100-0 SHAPE LEVEL LEVEL

OSCILLATOR 3

0.05Hz 500Hz 50 100-0 SHAPE LEVEL LEVEL

FILTER / OSSILATOR

FREQUENCY RESPONSE LEVEL

RING MODULATOR

LEVEL

REVERB

LEVEL MIX FEEDBACK

NOISE GENERATOR

COLOUR LEVEL RATE LEVEL

S & H

LEVEL LEVEL

TRAPEZOID

ATTACK ON DECAY OFF TRAPEZOID SIGNAL

SOURCES

SOURCES	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	Noise	Input	Filter	Trapezoid	Envr signal	Ring mod	Reverb	Joystick
Output Ch1													
Output Ch2													
Oscillator 1													
Oscillator 2													
Oscillator 3													
Noise													
Input													
Filter													
Trapezoid													
Envr signal													
Ring mod													
Reverb													
Joystick													

TREATMENTS

Output Ch1 Output Ch2 Oscillator 1 Oscillator 2 Oscillator 3 Noise Input Filter Trapezoid Envr signal Ring mod Reverb Joystick

CONTROL INPUTS

Signal Inputs: Output, Mix, Envelope, Ring mod, Reverb, Filter, Oscillator Frequency, Decay, Reverb Mix, Filter Frequency, Output on level

Control Inputs: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

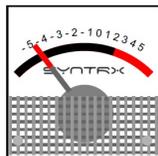
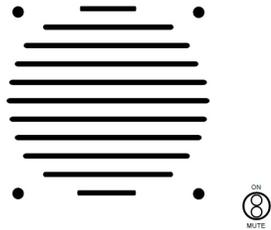
AB CDEFGHIJKL MN OP

RECALL SAVE SHIFT

SYNTAX

Experiment 99

The original Synthi educational handbook inspired patch (Experiment 9) for sound fx and rhythmic textures. The OSC3 is used to control the frequency of the OSC1; both Oscillators are ringmodulated and sent in parallel to the Outputs, the Filter and the Reverberator. The Filter and the Ringmodulator are connected to each other, but the Reverberator goes directly to the Outputs. The Filter frequency is modulated by sample&hold. The Joystick controls the OSC1 and the OSC3 frequency. Play with both Oscillator shapes and levels.



ON
MUTE

CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEVEL PAN

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH



ON
MUTE

OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz W SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **FILTER / OSCILLATOR** **TRAPEZOID**

1Hz 10KHz SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL ON DECAY

OSCILLATOR 3 **S & H**

0.05Hz 500Hz SHAPE M LEVEL LEVEL RATE LEVEL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

SIGNAL INPUTS **CONTROL INPUTS**

SIGNAL INPUTS	CONTROL INPUTS
Output Ch1	Output Ch Level
Output Ch2	Filter Frequency
Oscillator 1	Oscillator Frequency
Oscillator 2	Reverb Mix
Oscillator 3	Reverb Mix
Noise	Filter Frequency
Input Ch1	Output Ch Level
Input Ch2	Output Ch Level
Filter	Output Ch Level
Trapezoid	Output Ch Level
Envr. signal	Output Ch Level
Ring mod	Output Ch Level
Reverb	Output Ch Level
Joystick	Output Ch Level

TREATMENTS

Output Ch1 Output Ch2 Oscillator 1 Oscillator 2 Oscillator 3 Noise Input Ch1 Input Ch2 Filter Trapezoid Envr. signal Ring mod Reverb Joystick

A B C D E F G H I J K L M N O P

RECALL SAVE SHIFT

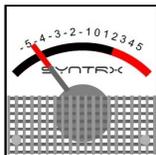
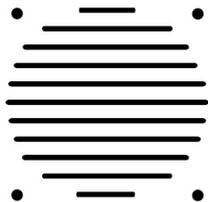
SYNTRX

ATTACK

Noise Machine 3

Another patch for abrasive noisy sounds with crossmodulated Oscillators. The Filter and the OSC2 frequency also modulated by Sample&Hold; the Filter and the OSC1 frequencies are modulated by the Trapezoid.

Unconventional patch is the Ringmodulator into the Filter frequency and the Trapezoid into the Filter. For a stereo effect the Filter signal is connected to one of the Outputs and the Ringmodulator to the other. The Joystick controls the OSC3 frequency and the Trapezoid decay time.



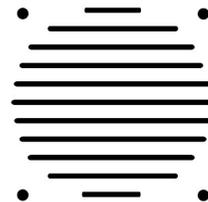
CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL LEFT PAN RIGHT LEVEL LEFT PAN RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW MIC LOW HIGH LOW HIGH



OSCILLATOR 1 **OSCILLATOR 2** **OSCILLATOR 3**

1Hz 10kHz 1Hz 10kHz 0.05Hz 500Hz

100-0 100-0 100-0

W SHAPE M Z SHAPE N Z SHAPE P

LEVEL LEVEL LEVEL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

FILTER / OSCILLATOR

FREQUENCY LOWPASS RESPONSE LEVEL

RING MODULATOR **REVERB**

LEVEL MIX FEEDBACK

TRAPEZOID

ATTACK ON DECAY

OFF TRAPEZOID SIGNAL

LEVEL ATTACK

SIGNAL INPUTS **CONTROL INPUTS**

	Output Ch1	Meter	Output Ch2	Output Envelope	Ring mod	Reverb	Filter	Oscillator frequency	Decay	Reverb Mix	Filter Frequency	Output Ch. level
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												

Output Ch1 Output Ch2 Oscillator 1 Oscillator 2 Oscillator 3 Noise Input Ch1 Ch2 Filter Trapezoid Env. signal Ring mod Reverb Joystick

SOURCES TREATMENTS

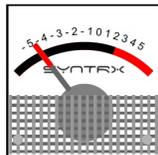
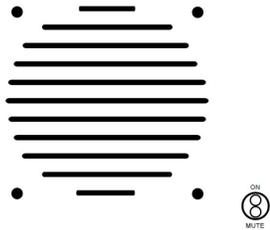
A B C D E F G H I J K L M N O P

RECALL SAVE SHIFT

SYNTRX

Breakcore Kick

A patch for making breakcore style drumbreaks and bassgrooves. All SYNTRX modulators are involved in pattern generation with random variable time divisions: Sample&Hold modulates frequency of all Oscillators and the Filter; simultaneously the Trapezoid modulates frequency of the OSC3 and the Filter + the OSC2 modulates the OSC1. Play with the Joystick for tempo and the Filter frequency changes.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz W SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **NOISE GENERATOR** **S & H** **TRAPEZOID**

1Hz 10KHz SHAPE LEVEL LEVEL 0.05Hz 500Hz COLOUR LEVEL RATE LEVEL ATTACK ON DECAY

SOURCES

	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Envr. signal	Ring mod	Reverb	Joystick
Output															
Signal															
Envelope															
Ring															
mod															
Reverb															
Filter															
Oscillator															
Frequency															
Decay															
Reverb Mix															
Filter Frequency															
Output on level															

TREATMENTS

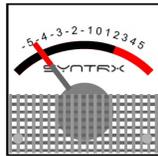
RECALL SAVE SHIFT

SYNTRAX

ATTACK

Acider

A sound of the patch consists of two layers: classic subtractive bass synth (the Oscillators and the Noise Generator through the Filter to the Envelope (VCA)) and noisy, reverberated presence sound (the OSC2 through the Ringmodulator and the Filter to the Reverberator). The presence sound volume can be adjusted separately with the Ringmodulator and the OSC2 square level. The OSC2 frequency and the Trapezoid decay are modulated by Sample&Hold (play with level and rate for variations of presence sound texture). The Filter frequency and the Trapezoid decay are modulated by Trapezoid (increase the level for a wider sound). A stereo FX is created by modulating the second Output level by the Reverberator signal. The Joystick controls the OSC2 frequency and the Trapezoid decay.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10Khz W SHAPE M LEVEL LEVEL FREQUENCY LOW PASS RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **TRAPEZOID**

1Hz 10Khz SHAPE LEVEL LEVEL LEVEL LEVEL ATTACK ON DECAY

0.05Hz 500Hz SHAPE LEVEL LEVEL LEVEL OFF TRAPEZOID SIGNAL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

SIGNAL INPUTS **CONTROL INPUTS**

SIGNAL INPUTS	CONTROL INPUTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Output Ch1	Envelope																
Output Ch2	Ring mod																
Oscillator 1	Reverb																
Oscillator 3	Filter																
Noise	Oscillator Frequency																
Input Ch1	Decay																
Input Ch2	Reverb Mix																
Filter	Filter Frequency																
Trapezoid	Output on level																
Env. signal																	
Ring mod																	
Reverb																	
Joystick																	

A B C D E F G H I J K L M N O P

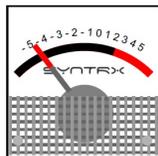
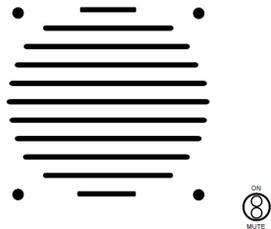
RECALL SAVE SHIFT

SYNTRX

ATTACK

Metal Cutter

A patch for sharp and loud moments on the track and sound discoveries in the FM area. The OSC1 frequency is modulated by the OSC3 (through Sample&Hold) and its frequency, shape and waveform levels are the main tools for timbre changes (shape relationship with saw level creates tremolo and vibrato effects). The Oscillator signals pass through the Filter and Ringmodulator to the Envelope (VCA) and the Outputs. The Output levels are modulated by the Filter and the Envelope signals (which are interconnected and each connected to its own output level). This creates richer sound and a tremolo stereo effect.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz W SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **NOISE GENERATOR** **S & H** **TRAPEZOID**

1Hz 10KHz SHAPE LEVEL LEVEL LEVEL LEVEL LEVEL ATTACK ON DECAY

0.05Hz 500Hz SHAPE LEVEL LEVEL LEVEL LEVEL LEVEL OFF MANUAL TRAPEZOID SIGNAL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

SOURCES	SIGNAL INPUTS																TREATMENTS
	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Env. signal	Ring mod	Reverb	Joystick		
Output Ch1																	
Output Ch2																	
Oscillator 1																	
Oscillator 2																	
Oscillator 3																	
+S&H																	
Noise																	
Input Ch1																	
Ch2																	
Filter																	
Trapezoid																	
Env. signal																	
Ring mod																	
Reverb																	
Joystick																	

Output Ch1 Output Ch2 Oscillator 1 Oscillator 2 Oscillator 3 +S&H Noise Input Ch1 Ch2 Filter Trapezoid Env. signal Ring mod Reverb Joystick

RECALL SAVE SHIFT

SYNTRX

Chords
 A classic subtractive synthesis patch for chord creation with a monosynth. Oscillators are patched into the Filter and the Ringmodulator, then to the Envelope (VCA) and the Reverberator. The Filter frequency is modulated by the Trapezoid. First tune the OSC1 to a "root note", then tune the intervals on the OSC2 and the OSC3. Play notes on a midi/cv keyboard or an external sequencer.



CHANNEL 1

LEVEL

OUTPUT

LEFT PAN RIGHT

CHANNEL 2

LEVEL

OUTPUT

LEFT PAN RIGHT

INPUT

CHANNEL 1

OUTPUT FILTER

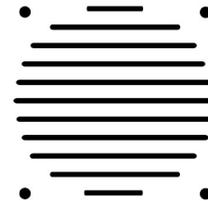
CHANNEL 1

INPUT

CHANNEL 2

OUTPUT FILTER

CHANNEL 2



OSCILLATOR 1

100-0

W SHAPE M

LEVEL

FILTER / OSCILLATOR

FREQUENCY

RESPONSE

LEVEL

RING MODULATOR

LEVEL

REVERB

DRV

MIX

FEEDBACK

OSCILLATOR 2

100-0

SHAPE

LEVEL

TRAPEZOID

ATTACK

ON

DECAY

OSCILLATOR 3

100-0

SHAPE

LEVEL

NOISE GENERATOR

COLOUR

LEVEL

S & H

RATE

LEVEL

	SIGNAL INPUTS																CONTROL INPUTS															
	Output Ch1	Output Ch2	Output	Envelope	Ring mod	Reverb	Filter	Oscillator Frequency	Reverb Mix	Decay	Reverb Rate	Filter Frequency	Output on level	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Output Ch1																																
Output Ch2																																
Output																																
Envelope																																
Ring mod																																
Reverb																																
Filter																																
Oscillator Frequency																																
Reverb Mix																																
Decay																																
Reverb Rate																																
Filter Frequency																																
Output on level																																
1																																
2																																
3																																
4																																
5																																
6																																
7																																
8																																
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12																																
13																																
14																																
15																																
16																																

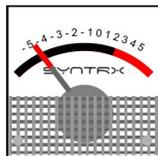
RECALL

SAVE

SHIFT

A Percussion

All SYNTRX sound sources are included for multi-layered percussion sound creation, and each layer level can mix separately. The OSC3 squarewave through the Filter form a bass layer, which is modulated by the Trapezoid for sweep effect. Crossmodulated OSC 1 and OSC2 through the Ring Mulator form the FM sound layer. In addition the Noise Generator along with oscillator signals go through the Envelope (VCA). The Stereo effect is created by the Envelope and the Ringmodulator signals that modulate the Output1 and Output2 levels. The Joystick controls frequency of the Oscillators 1 and 2 (character of FM sound layer).



CHANNEL 1

LEVEL

OUTPUT

PAN

CHANNEL 2

LEVEL

CHANNEL 2

PAN

CHANNEL 1

INPUT

CHANNEL 2

INPUT

CHANNEL 1

OUTPUT FILTER

CHANNEL 2

OUTPUT FILTER



OSCILLATOR 1

100-0

W SHAPE

LEVEL

LEVEL

FILTER / OSCILLATOR

FREQUENCY

RESPONSE

LEVEL

RING MODULATOR

LEVEL

REVERB

DRIVE

MIX

FEEDBACK

OSCILLATOR 2

100-0

F SHAPE

LEVEL

LEVEL

TRAPEZOID

ATTACK

ON

DECAY

OSCILLATOR 3

100-0

F SHAPE

LEVEL

LEVEL

S & H

NOISE

RATE

LEVEL

LEVEL

NOISE GENERATOR

COLOUR

LEVEL

SYNTRAX

RECALL SAVE SHIFT

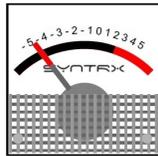
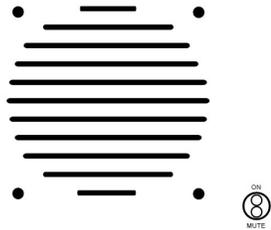
ATTACK

ATTACK

SOURCES	SIGNAL INPUTS										CONTROL INPUTS																	
	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Envr signal	Ring mod	Reverb	Joystick	Output	Mixer	Output	Envelope	Ring mod	Reverb	Filter	Oscillator Frequency	Decay	Reverb Mix	Filter Frequency	Output on level	
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												
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14																												
15																												
16																												

A Cymbal

A complex patch with the Filter and the Reverb feedbacks for a nuanced cymbal sounds. It consists of two main layers – the Noise Generator and highly tuned metallic undertone of ringmodulated OSC1 and OSC2. The Stereo effect is created by the Reverberator and the Ringmodulator signals that modulate Output 1 and Output 2 levels. The Joystick controls frequency of Oscillators 1 and 2 (character of metallic undertone). Play with the Oscillators shapes and levels, the Reverberator level and the Filter frequency and resonance.



CHANNEL 1

LEVEL

OUTPUT

LEFT PAN RIGHT

CHANNEL 2

LEVEL

CHANNEL 2

LEFT PAN RIGHT

CHANNEL 1

CHANNEL 1

CHANNEL 2

CHANNEL 2

CHANNEL 1

LOW HIGH

CHANNEL 2

LOW HIGH



OSCILLATOR 1

100-0

FILTER / OSCILLATOR

FREQUENCY LOWPASS RESPONSE LEVEL

RING MODULATOR

LEVEL

REVERB

DRI.0 MIX WET FEEDBACK

OSCILLATOR 2

100-0

OSCILLATOR 3

100-0

NOISE GENERATOR

S & H

TRAPEZOID

ATTACK ON DECAY

TRAPEZOID

OFF TRAPEZOID SIGNAL

NOISE GENERATOR

S & H

	SIGNAL INPUTS																CONTROL INPUTS															
	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Envr. signal	Ring mod	Reverb	Filter	Oscillator Frequency	Reverb Mix	Reverb Rate	Filter Frequency	Output on level												
1																																
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																
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15																																
16																																

A B C D E F G H I J K L M N O P

NOISE GENERATOR

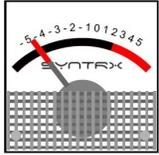
NOISE GENERATOR

S & H

SYNTRAX

NOISE GENERATOR

A Snare
 A Snare sound consists of 2 layers of sound in a specific circuit - noise and tone. Signals from the Noise Generator (noise) and the OSC1 (main tone) go through the Ring Modulator and the Filter to the Envelope (VCA). In parallel, the noise is sent directly to the Envelope for a cleaner sound that mixes with a sharp signal of the Ring Modulator. The OSC2 (additional tone) goes directly through the Filter and then to the Envelope (VCA). The Envelope signal in parallel with the Outputs is connected to the Reverberator. For timbre variations of sound the OSC2 and the Filter frequency are modulated with the Sample&Hold. The main modulator in this circuit is the Trapezoid, which modulates the OSC 1 and OSC 2 frequency for sweep effect and also is connected to the Ringmodulator and Reverb Mix level. The Joystick controls tonal changes (OSC 1 and 2 frequency).



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1

1Hz 10Khz

45

100-0

W SHAPE M

LEVEL

LEVEL

LEVEL

FILTER / OSCILLATOR

FREQUENCY

LOWPASS RESPONSE

LEVEL

RING MODULATOR

LEVEL

REVERB

DRY WET

MIX

FEEDBACK

OSCILLATOR 2

1Hz 10Khz

68

100-0

SHAPE

LEVEL

LEVEL

LEVEL

SIGNAL INPUTS

Output Ch1, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3, Noise, Input Ch1 Ch2, Filter, Trapezoid, Ring mod, Reverb, Joystick

CONTROL INPUTS

Envelope, Ring mod, Reverb, Filter, Oscillator Frequency, Decay, Reverb Mix, Filter Frequency, Output on level

TRAPEZOID

ATTACK

ON

DECAY

OFF

TRAPEZOID

SIGNAL

OSCILLATOR 3

0.05Hz 500Hz

92

100-0

SHAPE

LEVEL

LEVEL

LEVEL

SOURCES

Output Ch1, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3, Noise, Input Ch1 Ch2, Filter, Trapezoid, Ring mod, Reverb, Joystick

TREATMENTS

Env signal, Reverb, Joystick

A B C D E F G H I J K L M N O P

TRAPEZOID

OFF

TRAPEZOID

SIGNAL

NOISE GENERATOR

COLOUR

LEVEL

S & H

RATE

LEVEL

RECALL SAVE SHIFT

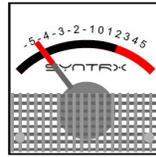
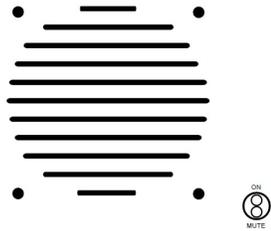
SYNTRX

LEVEL

ATTACK

A Kick

For creating deep kick on the SYNTRX the main focus should be on Oscillators tuning and relationship between levels and shapes. The main bass sound layer is created by the OSC 3 squarewave, modulated by the OSC2 and the Trapezoid for sweep effect. The OSC 1 and 2 are mixed in for extra sound character.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW 0 10 HIGH LOW 0 10 HIGH LOW 0 10 HIGH LOW 0 10 HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz W SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **TRAPEZOID**

1Hz 10KHz SHAPE LEVEL LEVEL LEVEL LEVEL ATTACK ON DECAY

0.05Hz 500Hz SHAPE LEVEL LEVEL LEVEL OFF TRAPEZOID SIGNAL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

SIGNAL INPUTS **CONTROL INPUTS**

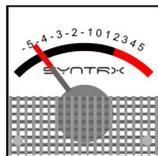
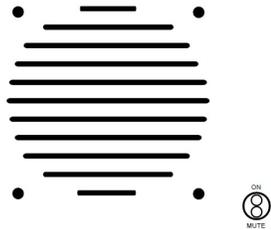
SOURCES	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Env. signal	Ring mod	Reverb	Joystick
ENV															
OSC1															
OSC2															
OSC3															
NOISE															
CH1															
CH2															
FILTER															
TRAPEZOID															
ENV															
RING MOD															
REVERB															
JOYSTICK															

RECALL SAVE SHIFT

SYNTRX

Marching Machine

The Noise Generator through the Envelope and the Filter in one channel as cymbal beat, Ringmodulated Oscillators through the Reverberator in the second channel as melody. The Envelope Decay, the OSC1 and the Filter Frequency is modulated by the OSC3. The Reverberator Mix Level is modulated by the Trapezoid. The Joystick controls the OSC3 Frequency and the Decay. Play with a midi/cv keyboard or sequencer.



CHANNEL 1

LEVEL

OUTPUT

LEFT PAN RIGHT

CHANNEL 2

LEVEL

OUTPUT FILTER

LOW HIGH

CHANNEL 1

CHANNEL 1

CHANNEL 2

CHANNEL 2

CHANNEL 1

CHANNEL 1

CHANNEL 2

CHANNEL 2



OSCILLATOR 1

100-0

W SHAPE M

LEVEL

OSCILLATOR 2

100-0

SHAPE

LEVEL

OSCILLATOR 3

100-0

SHAPE

LEVEL

FILTER / OSCILLATOR

FREQUENCY

RESPONSE

LEVEL

RING MODULATOR

LEVEL

REVERB

DRIVE

MIX

FEEDBACK

NOISE GENERATOR

COLOUR

LEVEL

S & H

RATE

LEVEL

SOURCES	SIGNAL INPUTS										CONTROL INPUTS											
	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Envr signal	Ring mod	Reverb	Filter	Oscillator Frequency	Decay	Reverb Mix	Reverb Rate	Filter Frequency	Output on level	
1																						
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						
16																						

A B C D E F G H I J K L M N O P

RECALL SAVE SHIFT

TRAPEZOID

ATTACK

ON

DECAY

OFF

MANUAL

TRAPEZOID

SIGNAL

NOISE GENERATOR

COLOUR

LEVEL

S & H

RATE

LEVEL

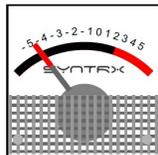
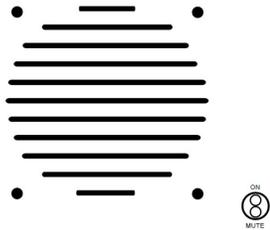
LEVEL

LEVEL

ATTACK

Incubator

A patch with a wide range of sound variations for creating experimental drone and texture sound Fxes, as well as for live improvisations. The Noise Generator and the Oscillators pass through the Ringmodulator and the Envelope (VCA) in one channel, while the OSC1 and the Reverberator pass through the self-modulated Filter in another channel. The Reverberator is additionally connected directly to both Outputs. The Trapezoid modulates the OSC3 frequency and Reverb Mix level. The OSC3+Sample&Hold modulates the OSC2, Decay, Reverb Mix and Filter Frequency. The OSC1 frequency is modulated by the OSC2. The Joystick controls OSC1, OSC3 and Filter Frequency as well as the Decay and it instantly radically changes the character of the sound.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

45 W SHAPE M LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL

OSCILLATOR 2 **OSCILLATOR 3** **TRAPEZOID**

1Hz 10KHz 0.05Hz 500Hz ATTACK ON DECAY

68 SHAPE LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL

94 SHAPE LEVEL LEVEL OFF TRAPEZOID SIGNAL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

SOURCES

SOURCES	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Env. signal	Ring mod	Reverb	Joystick
OSC1															
OSC2															
OSC3															
Noise															
Input Ch1															
Ch2															
Filter															
Trapezoid															
Env. signal															
Ring mod															
Reverb															
Joystick															

TREATMENTS

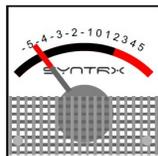
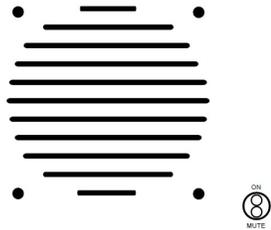
RECALL SAVE SHIFT

SYNTRAX

ATTACK

Klang

Metallic sounds with rich overtones for atonal melodies and percussions. Ringmodulated OSC1 and OSC2 signals pass through the Filter to the Envelope (VCA). In parallel, OSC1 is connected directly to the Filter. Both oscillator frequency is modulated by OSC3 (OSC1 with saw wave, OSC2 with squarewave). The OSC3 also modulates the Filter Frequency and the Trapezoid Decay (optional). The OSC2 is also modulated by the Trapezoid. The Ring Modulator and the Filter are connected to the Reverberator. The Reverberator signal returns to the Envelope (VCA), where it mixes with the Ring Modulator and the Filter signals. The stereo effect is created by the Filter and the Ring Modulator which is additionally connected to its own Output channel, as well as the Reverberator which modulates the Output 2 mix level. Change the character of the sound with the Joystick, which controls the OSC2 and the OSC3 frequencies.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz W SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **NOISE GENERATOR** **S & H** **TRAPEZOID**

1Hz 10KHz 0.05Hz 500Hz COLOUR LEVEL RATE LEVEL ATTACK ON DECAY

NOISE GENERATOR **S & H** **TRAPEZOID**

LOW HIGH LEVEL RATE LEVEL OFF MANUAL TRAPEZOID SIGNAL

SIGNAL INPUTS **CONTROL INPUTS**

SIGNAL INPUTS	CONTROL INPUTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Output Ch1	Output Ch level																
Output Ch2	AD																
Oscillator 1	ASR																
Oscillator 2																	
Oscillator 3																	
Noise																	
Input Ch1																	
Input Ch2																	
Filter																	
Trapezoid																	
Envr signal																	
Ring mod																	
Reverb																	
Joystick																	

A B C D E F G H I J K L M N O P

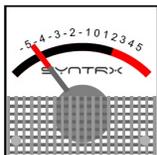
RECALL SAVE SHIFT

SYNTRX

ATTACK

Small Birds

A patch for high-frequency sound effects created by cross modulated Oscillators and Feedbacks (Filter and Reverb). The Filter Frequency is modulated by Sample&Hold (play with S&H rate and level for texture change). The Joystick controls Reverb Mix level and Oscillator 3 frequency, that is simultaneously modulated by Trapezoid in ASR mode.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz FREQUENCY RESPONSE LEVEL LEVEL LEVEL LEVEL MIX FEEDBACK

W SHAPE M LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL

OSCILLATOR 2 **TRAPEZOID**

1Hz 10KHz FREQUENCY RESPONSE LEVEL LEVEL LEVEL LEVEL ATTACK ON DECAY

SHAPE LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL OFF TRAPEZOID SIGNAL

OSCILLATOR 3 **NOISE GENERATOR** **S & H**

0.05Hz 500Hz COLOUR LEVEL RATE LEVEL

NOISE LEVEL LEVEL LEVEL LEVEL

SOURCES

	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Env. signal	Ring mod	Reverb	Joystick
Output															
Mix															
Envelope															
Ring mod															
Reverb															
Filter															
Oscillator Frequency															
Decay															
Reverb Mix															
Filter Frequency															
Output on level															

TREATMENTS

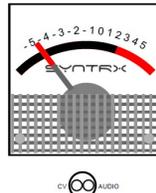
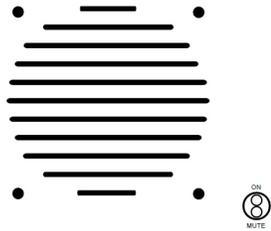
RECALL SAVE SHIFT

SYNTRAX

ATTACK

Drone one

A drone patch with ring-modulated oscillators and a noise generator through the self-oscillating filter and reverberator. The character of the sound flow is ensured by the speed ratio of both filter frequency modulators - fast trapezoid and OSC3 saw wave at the lowest frequency. In addition, both modulators interact with each other - the decay of envelope generator is modulated by OSC3 and the OSC3 frequency is modulated by the trapezoid level. The joystick controls filter frequency (X-axis) and reverb mix (Y-axis).



CHANNEL 1

LEVEL

OUTPUT

PAN

CHANNEL 2

LEVEL

OUTPUT

PAN

INPUT

CHANNEL 1

OUTPUT FILTER

CHANNEL 1

INPUT

CHANNEL 2

OUTPUT FILTER

CHANNEL 2



OSCILLATOR 1

LEVEL

OSCILLATOR 2

LEVEL

OSCILLATOR 3

LEVEL

NOISE GENERATOR

LEVEL

S & H

LEVEL

FILTER / OSCILLATOR

FREQUENCY

REVERB

MIX

TRAPEZOID

ATTACK

TRAPEZOID

ON

TRAPEZOID

DECAY

TRAPEZOID

OFF

TRAPEZOID

SIGNAL

TRAPEZOID

LEVEL

TRAPEZOID

LEVEL

TRAPEZOID

LEVEL

TRAPEZOID

LEVEL

SIGNAL INPUTS

Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3 +S&H	Noise	Input Ch1	Input Ch2	Filter	Trapezoid	Envr. signal	Ring mod	Reverb	Joystick
Output	Mix	Envelope	Ring mod	Reverb	Filter	Oscillator Frequency	Reverb Mix	Filter Frequency	Output on level				

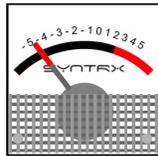
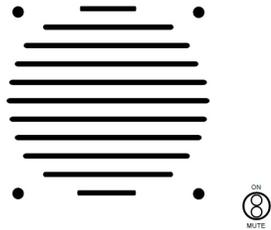
CONTROL INPUTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

TREATMENTS

Sci-Fi drone

A patch for sound designers of sci-fi soundtracks. A low rumble drone is created by the noise generator in the darker position of the color regulator through the filter in output 1 (dark-colored noise of the SYNTRX is relatively quiet, so the overall level of the circuit must be adjusted). Additional voices are made by the hi-pitched oscillators 1 & 2 through the ring modulator and reverberator in output 2, modulated by sample & hold. The reverb mix level is modulated by OSC2 and the attenuated filter signal. The joystick controls filter frequency (X-axis) and OSC2 frequency (Y-axis).



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz W SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **NOISE GENERATOR** **S & H** **TRAPEZOID**

1Hz 10KHz SHAPE LEVEL LEVEL 0.05Hz 500Hz COLOUR LEVEL RATE LEVEL ATTACK ON DECAY

NOISE GENERATOR **S & H** **TRAPEZOID**

LOW HIGH LEVEL LEVEL LEVEL LEVEL OFF MANUAL TRAPEZOID SIGNAL

Output Ch1 Output Ch2 Oscillator 1 Oscillator 2 Oscillator 3 Noise Input Ch1 Ch2 Filter Trapezoid Env. signal Ring mod Reverb Joystick

SIGNAL INPUTS CONTROL INPUTS

SIGNAL INPUTS	CONTROL INPUTS
Output Ch1	Oscillator Frequency
Output Ch2	Reverb Mix
Oscillator 1	Reverb Rate
Oscillator 2	Filter Frequency
Oscillator 3	Filter Ch. Level
Noise	
Input Ch1	
Input Ch2	
Filter	
Trapezoid	
Env. signal	
Ring mod	
Reverb	
Joystick	

A B C D E F G H I J K L M N O P

RECALL SAVE SHIFT

SYNTRAX

ATTACK

Never Ending Story

Another Patch for droning with a wide potential for sound variations. Oscillators 1&2 are connected directly to the first output and in parallel through the filter to the second output. This allows you to adjust the timbre ratio between the filtered and direct signals in the mixer section. A ring modulator with noise, trapezoid and output1 signals is also connected to output 1. The noise signal via the envelope generator (VCA) is connected in parallel to the filter output 2, reverberator through both outputs and straight to output 2 - it acts as a hi-hat. The filter frequency is modulated by sample & hold while the reverb mix level is modulated by the trapezoid. The joystick controls filter frequency (X-axis) and decay (Y-axis). You can play with the oscillator tunings and shapes for sound variations.



CHANNEL 1

LEVEL

OUTPUT

LEFT PAN RIGHT

CHANNEL 2

LEVEL

CHANNEL 2

LEFT PAN RIGHT

CHANNEL 1

CHANNEL 1

CHANNEL 2

CHANNEL 2

CHANNEL 1

LOW HIGH

CHANNEL 2

LOW HIGH



OSCILLATOR 1

100-0

W SHAPE M

LEVEL

LEVEL

FILTER / OSCILLATOR

FREQUENCY

LOW RESPONSE HIGH

LEVEL

RING MODULATOR

LEVEL

REVERB

DRV

MIX

FEEDBACK

OSCILLATOR 2

100-0

SHAPE

LEVEL

LEVEL

OSCILLATOR 3

100-0

SHAPE

LEVEL

LEVEL

NOISE GENERATOR

COLOUR

LEVEL

S & H

RATE

LEVEL

TRAPEZOID

ATTACK

ON

DECAY

TRAPEZOID

OFF

TRAPEZOID

SIGNAL

NOISE GENERATOR

COLOUR

LEVEL

S & H

RATE

LEVEL

NOISE GENERATOR

COLOUR

LEVEL

S & H

RATE

LEVEL

NOISE GENERATOR

COLOUR

LEVEL

S & H

RATE

LEVEL

NOISE GENERATOR

COLOUR

LEVEL

S & H

RATE

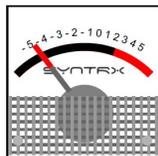
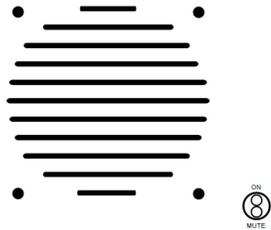
LEVEL

	SIGNAL INPUTS																CONTROL INPUTS															
	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Envr signal	Ring mod	Reverb	Joystick	Output	Mix	Envelope	Ring mod	Reverb	Filter	Oscillator Frequency	Reverb Mix	Filter Frequency	Output on level							
1																																
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																
13																																
14																																
15																																
16																																

SYNTRAX

Tractor

A Patch for creating low and abrasive industrial-sounding drones. oscillators 1&3 + trapezoid are connected to the ring modulator and then to output1. Oscillators 2&3 + noise generator go through the filter in output 2. The filter signal is additionally connected to a reverberator, which goes through both outputs. The reverberator mix level is modulated by sample & hold and trapezoid (you can play with reverb feedback for rhythmic resonances). Sample & hold also modulates the decay and filter frequency. The joystick controls filter frequency (X-axis) and OSC2 frequency (Y-axis).



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz W SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **NOISE GENERATOR** **S & H** **TRAPEZOID**

1Hz 10KHz SHAPE LEVEL LEVEL 0.05Hz 500Hz COLOUR LEVEL RATE LEVEL ATTACK ON DECAY

NOISE GENERATOR **S & H** **TRAPEZOID**

LOW HIGH LEVEL RATE LEVEL OFF MANUAL TRAPEZOID SIGNAL

SIGNAL INPUTS **CONTROL INPUTS**

	Output	Mix	Output	Ring	Reverb	Filter	Oscillator	Frequency	Decay	Reverb Mix	Filter Frequency	Output	on level
Output Ch1	●												
Output Ch2		●											
Oscillator 1			●										
Oscillator 2				●									
Oscillator 3					●								
+S&H						●							
Noise							●						
Input Ch1								●					
Ch2									●				
Filter										●			
Trapezoid											●		
Env. signal												●	
Ring mod													●
Reverb													●
Joystick													●

A B C D E F G H I J K L M N O P

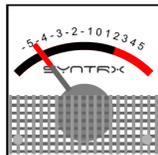
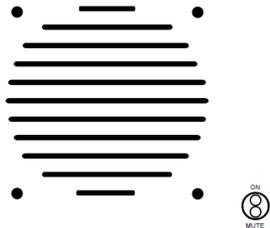
RECALL SAVE SHIFT

SYNTRX

ATTACK

Gallop

Gallop-style break-beat pulsations create a relationship between the frequencies of both modulators - trapezoid and oscillator3. The trapezoid modulates filter and OSC1 frequency, OSC3 modulates filter frequency, decay and OSC1 + noise signals in the ring modulator. All signals pass through the filter and envelope generator (VCA) connected in parallel to both outputs. The envelope generator signal is plugged back into the filter for a fatter sound. You can play with OSC2 frequency for tonal changes and with OSC3 frequency and trapezoid settings for rhythmic variations. The joystick controls filter frequency (X-axis) and OSC2 frequency (Y-axis).



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 LOW HIGH LOW HIGH CHANNEL 1 CHANNEL 2



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz W SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **TRAPEZOID**

1Hz 10KHz FREE SHAPE LEVEL LEVEL ATTACK ON DECAY

0.05Hz 500Hz FREE SHAPE LEVEL LEVEL OFF MANUAL TRAPEZOID SIGNAL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

SIGNAL INPUTS **CONTROL INPUTS**

Output	Ch1	Ch2	Env	Ring	Reverb	Filter	Oscillator	Reverb	Filter	Output
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										

A B C D E F G H I J K L M N O P

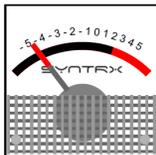
RECALL SAVE SHIFT

SYNTRAK

ATTACK

CROSSROADS

Experimental paraphonic sound circuit in which OSC2 (second voice) modulates the frequency of OSC3 (first voice), while OSC3 modulates OSC2 in the ring modulator via S&H. The Ringmodulator signal with the second voice is connected to the first output, but the Filter signal with the first voice to the Second Output. In parallel, the second voice passes through the Reverberator, which is connected to both outputs. The Filter frequency is modulated by Trapezoid and Sample&Hold. Reverb Mix level modulated by S&H and Envelope signal. Therefore, the GATE signal of the first voice also affects the second voice passing through the Reverberator. Decay level modulated by Trapezoid. The Joystick controls the OSC1 & Filter frequency.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz W SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **NOISE GENERATOR** **S & H** **TRAPEZOID**

1Hz 10KHz 0.05Hz 500Hz COLOUR LEVEL RATE LEVEL ATTACK ON DECAY

NOISE GENERATOR **S & H** **TRAPEZOID**

LOW HIGH LEVEL RATE LEVEL OFF MANUAL TRAPEZOID SIGNAL

SIGNAL INPUTS **CONTROL INPUTS**

SOURCES	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Envr signal	Ring mod	Reverb	Joystick
ENV															
OSC1															
OSC2															
OSC3															
NOISE															
INPUT															
ENV															
REVERB															
JOYSTICK															

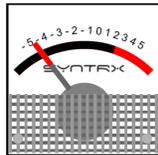
Output Ch1 Level Output Ch2 Level Oscillator 1 Level Oscillator 2 Level Oscillator 3 Level +S&H Level Noise Level Input Ch1 Level Ch2 Level Filter Level Trapezoid Level Envr signal Level Ring mod Level Reverb Level Joystick

RECALL SAVE SHIFT

SYNTRAX

CONTROLLED MADNESS

Extreme modulations patch for noisy live performances and sound effects. All oscillators are cross modulated, OSC2 & OSC3 ring-modulated. Sample&Hold modulates OSC1, Filter frequency, Reverb Mix level and Output level of the second channel for stereo effect. Trapezoid also modulates Reverb Mix level and is used as a second modulation source in the Ring modulator. By controlling the OSC1 and OSC2 frequencies with a single Joystick manipulation, radical sound changes are possible.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL LEFT PAN RIGHT LEVEL LEFT PAN RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW 0 10 HIGH LOW 0 10 HIGH LOW 0 10 HIGH LOW 0 10 HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10Khz FREQUENCY RESPONSE LEVEL LEVEL LEVEL LEVEL

W SHAPE M LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL

OSCILLATOR 2 **OSCILLATOR 3** **NOISE GENERATOR** **S & H** **TRAPEZOID**

1Hz 10Khz 0.05Hz 500Hz COLOUR LEVEL RATE LEVEL ATTACK ON DECAY

SHAPE LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL

SOURCES

	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Env. signal	Ring mod	Reverb	Joystick
Output															
Mix															
Envelope															
Ring mod															
Reverb															
Filter															
Oscillator Frequency															
Decay															
Reverb Mix															
Filter Frequency															
Output on level															

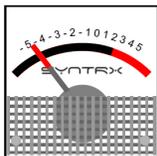
TREATMENTS

RECALL SAVE SHIFT

SYNTRAX

PARARINGPHONIC

A more advanced Paraphonic sound circuit in which the second voice passes through the Ringmodulator and is modulated by the first voice (VCO3). Next, the Ringmodulator signal goes through the Reverbator to one Output, but the OSC1, OSC3, and Noise signals pass through the Envelope Generator and Filter to the other Output. Trapezoid and Sample&Hold modulate the Filter Frequency. The Joystick controls the Filter frequency and the Reverb Mix level.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz W SHAPE M LEVEL LEVEL FREQUENCY RESPONSE LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **TRAPEZOID**

1Hz 10KHz SHAPE LEVEL LEVEL ATTACK ON DECAY

0.05Hz 500Hz SHAPE LEVEL LEVEL OFF TRAPEZOID SIGNAL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

SIGNAL INPUTS **CONTROL INPUTS**

	Output	Mixer	Output	Envelope	Ring mod	Reverb	Filter	Oscillator Frequency	Decay	Reverb Mix	Filter Frequency	Output on level		
Output Ch1	●													
Output Ch2		●												
Oscillator 1			●											
Oscillator 2				●										
Oscillator 3					●									
Noise						●								
Input Ch1							●							
Input Ch2								●						
Filter									●					
Trapezoid										●				
Env. signal											●			
Ring mod												●		
Reverb													●	
Joystick														●

AB CDEFGHIJKL MNO P

RECALL SAVE SHIFT

SYNTRX

ATTACK

CONTROLLED MADNESS 2

Another experimental patch with cross-modulated and ring-modulated oscillators. OSC1, OSC3 & Noise Generator are connected to a Filter, the signal of which is further distributed to the Envelope Generator (VCA), Reverbator and directly to the second Output. OSC2 & Noise Generator signals pass through Ringmodulator, modulated by OSC3 through the S&H and Trapezoid. Sample&Hold also modulates Decay level, OSC2, and Filter frequency. Trapezoid modulates Decay level, VCO3 and Filter frequency. The Joystick controls OSC1 frequency and Decay level.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz FREQUENCY RESPONSE LEVEL LEVEL LEVEL LEVEL MIX FEEDBACK

W SHAPE M LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL

OSCILLATOR 2 **OSCILLATOR 3** **TRAPEZOID**

1Hz 10KHz 0.05Hz 500Hz ATTACK ON DECAY

SHAPE LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL

NOISE GENERATOR **S & H**

COLOUR LEVEL RATE LEVEL

SIGNAL INPUTS **CONTROL INPUTS**

	Output	Env	Ring	Reverb	Filter	Oscillator	Decay	Reverb Mix	Filter	Output
Output Ch1	●									1
Output Ch2										2
Oscillator 1						●				3
Oscillator 2										4
Oscillator 3										5
+S&H										6
Noise										7
Input Ch1										8
Ch2										9
Filter										10
Trapezoid										11
Env signal										12
Ring mod										13
Reverb										14
Joystick										15
										16

A B C D E F G H I J K L M N O P

RECALL SAVE SHIFT

SYNTRAX

ATTACK

Clutter
 A patch with radical modulation capabilities for playing sound effects and noise improvisation with the Joystick. The OSC1 and Noise signals pass through the Ringmodulator (Sample & Hold as the modulation source), Envelope Generator, and Reverberator. OSC2 is connected to the Filter and further to the Outputs. In parallel, the Filter signal is connected to the Ringmodulator together with OSC1. For a stereo effect, the Ring Modulator and Envelope Generator are each connected to their own Output channel. OSC1 frequency is modulated by OSC2; OSC2 by OSC3's square signal and Noise, OSC3 - by Trapezoid and Sample&Hold. The Filter frequency is modulated by the Ringmodulator. The Joystick controls OSC1&3 Frequency (X-Axis) + OSC2 Frequency and Decay (Y-Axis).



CHANNEL 1

LEVEL

OUTPUT

LEFT PAN RIGHT

CHANNEL 2

LEVEL

OUTPUT

LEFT PAN RIGHT

CHANNEL 1

CHANNEL 1

CHANNEL 2

CHANNEL 2

CHANNEL 1

LOW HIGH

CHANNEL 2

LOW HIGH



OSCILLATOR 1

100-0

W SHAPE M

LEVEL

LEVEL

FILTER / OSCILLATOR

FREQUENCY

LOW RESPONSE HIGH

LEVEL

RING MODULATOR

LEVEL

REVERB

DRIVE

MIX WET

FEEDBACK

OSCILLATOR 2

100-0

SHAPE

LEVEL

LEVEL

OSCILLATOR 3

100-0

SHAPE

LEVEL

LEVEL

TRAPEZOID

ATTACK

ON

DECAY

NOISE GENERATOR

COLOUR

LEVEL

S & H

RATE

LEVEL

SOURCES	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	Noise	Input Ch1	Ch2	Filter	Trapezoid	Envr signal	Ring mod	Reverb	Joystick
OSC1														
OSC2														
OSC3														
Noise														
Input														
Filter														
Trapezoid														
Envr signal														
Ring mod														
Reverb														
Joystick														

RECALL

SAVE

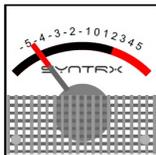
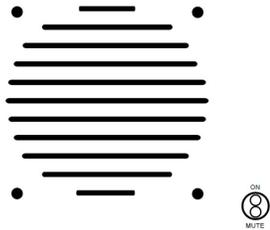
SHIFT

ATTACK

ATTACK

Arp Bass

A variation of a subtractive synthesizer in which all three oscillators are connected in a specific way with a Ring Modulator, Envelope Generator, Filter and Reverberator. The OSC1 signal passes in parallel through the Reverberator and the Ring Modulator (OSC2 and Sample&Hold as modulation sources) and then the Filter. Therefore, it is not affected by the Envelope Generator. OSC2 & 3 signals go through the Envelope Generator to the Filter and Reverberator; OSC3 is also connected in parallel directly to the Reverberator. The Filter frequency is modulated by OSC1, Trapezoid, and the Filter signal itself. Envelope Decay is modulated by Sample&Hold. The Ringmodulator is connected to the first Output channel and the Filter - to the second, while the Reverberator is connected to both. Together with the Trapezoid, which modulates the level of the first Output, it creates a pronounced stereo effect. Joystick controls Decay time and Reverb Mix.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz FREQUENCY RESPONSE LEVEL LEVEL LEVEL LEVEL MIX FEEDBACK

OSCILLATOR 2 **OSCILLATOR 3** **NOISE GENERATOR** **S & H** **TRAPEZOID**

1Hz 10KHz 0.05Hz 500Hz COLOUR LEVEL RATE LEVEL ATTACK ON DECAY

OFF MANUAL TRAPEZOID SIGNAL

SOURCES

	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Envr. signal	Ring mod	Reverb	Joystick
OSC1															
OSC2															
OSC3															
Noise															
Input															
Filter															
Trapezoid															
Envr. signal															
Ring mod															
Reverb															
Joystick															

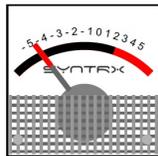
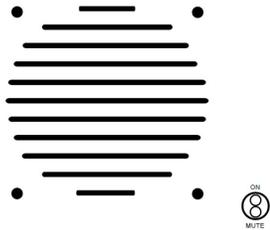
TREATMENTS

RECALL SAVE SHIFT

SYNTRX

Lead Synth

A patch for a rich-sounding solo synthesizer with tremolo, vibrato, overtone, and chord variations. OSC1 and OSC2 form the basic voice and the OSC3 signal is used to form chords. The OSC1 and Noise signals pass through the Filter to the first Output. The Noise signal is also connected in parallel to the Envelope Generator, the signal of which is still connected to the Filter. The OSC2 signal passes through the Reverberator to both outputs, but OSC3 is connected in parallel to both the Reverberator and the Ringmodulator, which go through the second Output. The Filter frequency is modulated by OSC3's square signal and Trapezoid; the Decay is modulated by Sample&Hold; OSC3 frequency is modulated by the Trapezoid. The vibrato effect is produced by modulating OSC1 Frequency with Noise. The Joystick controls the Decay time and the Reverb Mix. Play with OSC3 frequency for tonal variations.



CHANNEL 1 **OUTPUT** **CHANNEL 2**

LEVEL PAN LEFT RIGHT LEVEL PAN LEFT RIGHT

INPUT **OUTPUT FILTER**

CHANNEL 1 MIC CHANNEL 2 CHANNEL 1 CHANNEL 2

LOW HIGH LOW HIGH LOW HIGH LOW HIGH



OSCILLATOR 1 **FILTER / OSCILLATOR** **RING MODULATOR** **REVERB**

1Hz 10KHz FREQUENCY RESPONSE LEVEL LEVEL LEVEL LEVEL MIX FEEDBACK

W SHAPE M LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL

OSCILLATOR 2 **TRAPEZOID**

1Hz 10KHz FREQUENCY RESPONSE LEVEL LEVEL LEVEL LEVEL ATTACK ON DECAY

SHAPE M LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL LEVEL

OSCILLATOR 3 **NOISE GENERATOR** **S & H**

0.05Hz 500Hz COLOUR LEVEL RATE LEVEL

SHAPE M LEVEL LEVEL LEVEL LEVEL

SIGNAL INPUTS **CONTROL INPUTS**

Output	Ch1	Ch2	Env	Ring	Reverb	Filter	Oscillator	Decay	Reverb	Filter	Output
Output Ch1	●	●	●	●	●	●	●	●	●	●	●
Output Ch2	●	●	●	●	●	●	●	●	●	●	●
Oscillator 1	●	●	●	●	●	●	●	●	●	●	●
Oscillator 2	●	●	●	●	●	●	●	●	●	●	●
Oscillator 3	●	●	●	●	●	●	●	●	●	●	●
Noise	●	●	●	●	●	●	●	●	●	●	●
Input	●	●	●	●	●	●	●	●	●	●	●
Filter	●	●	●	●	●	●	●	●	●	●	●
Trapezoid	●	●	●	●	●	●	●	●	●	●	●
Env. signal	●	●	●	●	●	●	●	●	●	●	●
Ring mod	●	●	●	●	●	●	●	●	●	●	●
Reverb	●	●	●	●	●	●	●	●	●	●	●
Joystick	●	●	●	●	●	●	●	●	●	●	●

A B C D E F G H I J K L M N O P

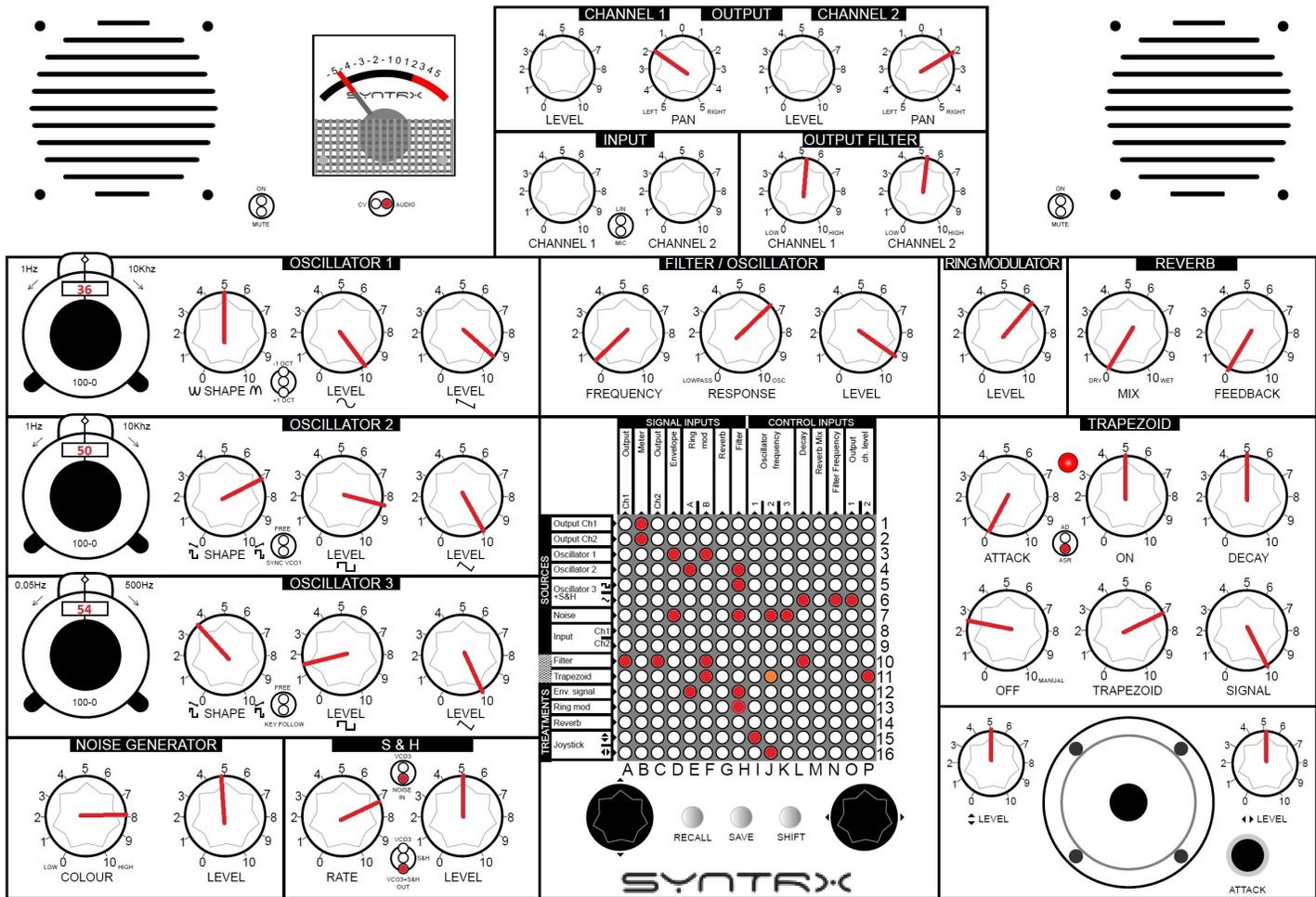
RECALL SAVE SHIFT

SYNTRX

ATTACK

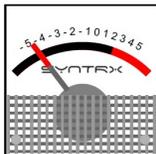
Whirlpool

A Joystick-playable patch for Sample&Hold generated bass lines. OSC1&2 signals pass through the Filter, Envelope Generator and Reverberator. OSC1 is also connected to the Ring Modulator together with Noise, and the Ring Modulator signal is further connected to the Filter. The Sample&Hold signal modulates OSC2 and the Filter frequency as well as Decay time. Together with the Output Ch.1 signal, Sample & Hold also serves as a modulation source in the Ring Modulator. A stereo effect is created by the Filter and Envelope Generator signals, which are each connected to their own Output channel. The Joystick controls OSC1&2 frequency.



Sprockets 3

A patch for generation of irregular and floating rhythm parts. OSC2 and OSC3 frequencies are modulated by the Noise signal, and together they pass through the Filter. In parallel, OSC2 is modulated by Trapezoid. The OSC1 signal, together with the Filter and Trapezoid signals, passes through the Ring Modulator (OSC2 and Envelope Signal as modulation sources), which is also connected to the Filter. Sample & Hold modulates the Decay and Filter Frequency. The Stereo Effect is created by Trapezoid and Sample & Hold, which each modulate their own Output signal. The Joystick controls OSC1 and OSC2 frequencies.



CHANNEL 1

LEVEL

OUTPUT

LEFT PAN RIGHT

CHANNEL 2

LEVEL

CHANNEL 2

LEFT PAN RIGHT

CHANNEL 1

CHANNEL 1

INPUT

CH1 MIC

CHANNEL 1

LOW HIGH CHANNEL 1

CHANNEL 2

LOW HIGH CHANNEL 2



OSCILLATOR 1

1Hz 10KHz

100-0

W SHAPE M

LEVEL

LEVEL

FILTER / OSCILLATOR

FREQUENCY

LOW RESPONSE HIGH

LEVEL

RING MODULATOR

LEVEL

REVERB

DRV

MIX

FEEDBACK

OSCILLATOR 2

1Hz 10KHz

100-0

W SHAPE M

LEVEL

LEVEL

OSCILLATOR 3

0.05Hz 500Hz

100-0

W SHAPE M

LEVEL

LEVEL

TRAPEZOID

ATTACK

ON

DECAY

NOISE GENERATOR

LOW COLOUR HIGH

LEVEL

S & H

RATE

LEVEL

SOURCES	Output Ch1	Output Ch2	Oscillator 1	Oscillator 2	Oscillator 3	+S&H	Noise	Input Ch1	Ch2	Filter	Trapezoid	Envr signal	Ring mod	Reverb	Joystick
Output Ch1	●														
Output Ch2		●													
Oscillator 1			●												
Oscillator 2				●											
Oscillator 3					●										
+S&H						●									
Noise							●								
Input Ch1								●							
Ch2									●						
Filter										●					
Trapezoid											●				
Envr signal												●			
Ring mod													●		
Reverb														●	
Joystick															●

RECALL

SAVE

SHIFT

ATTACK

ATTACK

SYNTRX

Northern Landscape

Cold white Noise and filtered wind textures along with irregular bass batches generated by Sample & Hold. OSC1 is modulated by OSC3, Sample&Hold, Noise, and Filter signals. OSC2 is modulated by OSC1, Sample&Hold, and Trapezoid signals. OSC3 is modulated by the Ring Modulator (OSC2 and OSC3 as modulation sources) and the Filter. The Ring Modulator signal is also connected to the Filter, which is connected to the Outputs and Reverbator. The Filter Frequency is modulated by Sample&Hold. The Joystick controls OSC2 and Filter frequency.

CHANNEL 1 OUTPUT CHANNEL 2

LEVEL PAN LEFT RIGHT

INPUT OUTPUT FILTER

CHANNEL 1 CHANNEL 2

LOW HIGH

OSCILLATOR 1

1Hz 10KHz

68

100-0

W SHAPE M

LEVEL

OSCILLATOR 2

1Hz 10KHz

28

100-0

SHAPE

LEVEL

OSCILLATOR 3

0.05Hz 500Hz

45

100-0

SHAPE

LEVEL

FILTER / OSCILLATOR

FREQUENCY RESPONSE LEVEL

RING MODULATOR

LEVEL

REVERB

LEVEL MIX FEEDBACK

TRAPEZOID

ATTACK ON DECAY

OFF MANUAL TRAPEZOID SIGNAL

NOISE GENERATOR

COLOUR LEVEL

S & H

RATE LEVEL

SIGNAL INPUTS

Output Ch1, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3 +S&H, Noise, Input Ch1 Ch2, Filter, Trapezoid, Env. signal, Ring mod, Reverb, Joystick

CONTROL INPUTS

Output on level, Filter Frequency, Reverb Mix, Filter Frequency, Output on level

SOURCES

Output Ch1, Output Ch2, Oscillator 1, Oscillator 2, Oscillator 3 +S&H, Noise, Input Ch1 Ch2, Filter, Trapezoid, Env. signal, Ring mod, Reverb, Joystick

TREATMENTS

RECALL SAVE SHIFT

SYNTRX

Sprockets 1

A circuit for industrial style rhythmic sound textures. OSC1 is modulated by OSC2&3 and Trapezoid; OSC2 is modulated by Sample&Hold. OSC1 and OSC2 signals pass through a Filter and a Reverberator. In parallel, the OSC1 signal passes through the Ring Modulator (OSC2, Sample&Hold, and Filter signals as modulation sources) and the Reverberator. The Filter and Ring Modulator signals are each connected to their own Output for a stereo effect, while the Reverberator is connected to both Outputs. The decay of the Trapezoid, Reverb Mix and Filter Frequency are modulated by Sample&Hold. The Joystick controls the Frequency of all Oscillators and Decay.

